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Title: Perfect score:

US-08-860-232-12 51 1 VMAGVGSPYV 10

Scoring table: Sequence:

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hits satisfying chosen parameters:

164575 segs, 16761186 residues

length: 0 length: 20

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Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
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29, Appl
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29, Appl
263, Appl
44, Appl
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17, Appl
18, Appl
19, Appl
10, Appl
11, Appl
                                                                                                                                                                                                                        RESULT 1
US-08-467-083-29
IS-08-467-083-29
; Sequence 29, Application US/08467083
notant No. 572603
                                                                                                                                                                                                                                                                                                                                                         sequence 29, Applicate patent No. 5726023 GENERAL INFORMATION:
    APPLICANT: Cheever, Martin A.
APPLICANT: Cheever, Mary L.
APPLICANT: Disis, Mary L.
TITLE OF INVENTION: HER-2/NEU ON
NUMBER OF SEQUENCES: 68
CORRESPONDENCE ADDRESS:
CORRESSEE: Seed and Berry
ADDRESSEE: Seed and Berry
STREET: 6300 Columbia Center,
CITY: Seattle
STATE: Washington
COUNTRY: US
ZIP: 98104-7092
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
                                                                                                                                                                                                                                                                                                                                                           2220114444
                                                                                                                                            IMMUNE REACTIVITY TO HER-2/NEU PROTEIN
FOR DIAGNOSIS AND TREATMENT OF MALIGNANCIES
HER-2/NEU ONCOGENE IS ASSOCIATED
68
                                                                                                                                                                                                                                                                                                                                                            US-08-725-736D-14
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5171839-5
US-08-945-168-10
US-08-945-168-10
US-08-945-168-10
                                                                                                          Center,
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                                                                                                             701 Fifth Avenue
                                                                                                                                                                                                                                                                                                                                                                  sequence 14, Appl sequence 36, Appli sequence 31, Appli sequence 5, Appli sequence 6, Appli sequence 10, Appli sequence 10, Appli sequence 10, Appli sequence 11, Appli sequence 12, Appli sequence 13, Appli sequence 13, Appli sequence 139, App sequence 139, Appli sequence 130, Appli sequence 130, Appli sequence 130, Appli sequence 16, Appli sequence 26, Appli sequence 27, Appli sequence 28, Appli sequence 28, Appli sequence 26, Appli sequence 27, Appli sequence 27, Appli sequence 28, Appli sequence 26, Appli sequence 27, Appli sequence 27, Appli sequence 28, Appli sequence 26, Appli sequence 27, Appli sequence 27, Appli sequence 28, Appli sequence 27, Appli sequence 2
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Post-processing:

Maximum Match (
Maximum Match)
Listing first

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Database

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Score

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Description

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US-08-466-348A-29
US-08-466-808B-29
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PCT-US95-16415-12
US-08-159-339A-263
US-08-414-417B-44
US-08-414-417B-44
US-08-418-44
US-08-418-43B-44
US-08-418-43B-44
US-08-418-6-80B-44
US-08-68-680B-41
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US-08-1725-7360-10
US-08-1725-7360-5
US-08-1725-7360-9
US-08-18-53-5

sequence seq

Sequence

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US-08-414-417B-29
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Patent No. 5
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Best Local Similarity 100.
Matches 10; Conservative
                                                                                NFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                         NAME: Sharkey, Richard G. REGISTRATION NUMBER: 32,629 REFERENCE/DOCKET NUMBER: 920 TELECOMMUNICATION INFORMATION: TELEPHONE: (206) 622-4900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                             APPLICATION NUMBER: US/OFFILING DATE: 31-MAR-1995
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Cheever, Martin A.
APPLICANT: Disis, Mary L.
TITLE OF INVENTION: INMUNE REACTIVITY TO HER-2/neu PROTEIN
TITLE OF INVENTION: FOR DIAGNOSIS AND TREATMENT OF MALIGNANCIES IN WHICH THE
TITLE OF INVENTION: HER-2/neu ONCOGENE IS ASSOCIATED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: 32,629
REFERENCE/DOCKET NUMBER: 920010.448C2
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
TELERAX: (206) 682-6031
TELEX: 3723836 SEEDANBERRY
INFORMATION FOR SEQ ID NO: 29:
SEQUENCE CHARACTERISTIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/08/
FILING DATE: 06-JUN-1995
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/
FILING DATE: 06-JUN-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
                                                      ENGTH:
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ZIP: 98104-7092
                                                                                                                                                                                                                                                                                                                                                                                                           STREET: 6300 C
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OPERATING SYSTEM:
                                   amino acid
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5801005
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                                                                           (206) 682-6031
TD NO: 29:
                                                                                                                                                                                                                                                                                                                                                                                                                           E: Seed and Berry LLP 6300 Columbia Center,
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In Release #1.0, Version #1.25
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                                                                                                                                          920010.448C2
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Pred. No. 0.0026;
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                                                    Sequence 29, Application US/08468545B
Patent No. 5876712
                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 10; Conserv
                               GENERAL INFORMATION:
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Best Local Similarity
Matches 10; Conserva
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                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: (206) 682-6031
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-414-417B-29
       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: Sharkey, Richard G
REGISTRATION NUMBER: 32,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER: 92,629
REFERENCE/DOCKET NUMBER: 92
TELECOMMUNICATION: NEORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC COMPALIBLE

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PATENTIN PC-BASE #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/486,348A

FILING DATE: 07-TUN-1995

CLASSIFICATION: 424

APPLICATION: 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATI
                                                                                                                                                                                                                                                                                                                                                   TYPE: a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: IMMUNE REACTIVITY TO HER-2/neu PROTEIN
TITLE OF INVENTION: FOR DIAGNOSIS AND TREATMENT OF MALIGNANCIES IN WHICH THE
TITLE OF INVENTION: HER-2/neu ONCOGENE IS ASSOCIATED
                                                                                                                                                 1 VMAGVGSPYV 10
                                                                                                                                                                               1 VMAGVGSPYV 10
                                                                                                                                                                                                                                                                                                                                TYPE: amino acid
STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Cheever, Martin A. APPLICANT: Disis, Mary L.
                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY: US
ZIP: 98104-7092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STATE: Washington COUNTRY: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET: 6300 (CITY: Seattle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE:
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TOPOLOGY: 11
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o. 5846538
Cheever, Martin A.
Disis, Mary L.
                                                                                                                                                                                                                                                                                                                                                          10 amino acids
                                                                                                                                                                                                                Conservative
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Pred. No.
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0.0026;
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: (206) 682-6031
INFORMATION FOR SEQ ID NO: 29:
                                 COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/466,680B
FILING DATE: 06-JUN-1995
                                                                                                                                                                                                                                                                                                      APPLICANT: Cheever, Martin A.
APPLICANT: Disis, Mary L.
TITLE OF INVENTION: IMMUNE REACTIVITY TO HER-2/neu PROTEIN
TITLE OF INVENTION: FOR DIAGNOSIS AND TREATMENT OF MALIGNANCIES IN WHICH THE
TITLE OF INVENTION: HER-2/neu ONCOGENE IS ASSOCIATED
NUMBER OF SEQUENCES: 69
CORRESPONDENCE ADDRESS:
                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REGISTRATION NUMBER: 32,629
REFERENCE/DOCKET NUMBER: 920
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206),622-4900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSEE: Seed and Berry LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES:
                                                                                                                                                                                               COUNTRY: US
ZIP: 98104-7092
                                                                                                                                                                                                                                                                                 STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: amino acid
STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/0 FILING DATE: 06-JUN-1995
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                  CLASSIFICATION:
                                                                                                                                                                                                                                                                                                    ADDRESSEE:
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                                                                                                                                                                                                                                                                                                  Seed and Berry LLP
INFORMATION:
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FOR DIAGNOSIS AND TREATMENT OF MALIGNANCIES IN WHICH THE
HER-2/neu ONCOGENE IS ASSOCIATED
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Pred. No. 0.0026;
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; MOLECULE TYPE:
PCT-US95-16415-12
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                                Matches
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                                                               Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                          TELEFAX: (619) 554-631
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: (206) 682-6031 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 554-2937
                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 01
FILING DATE: 14-DEC-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Sharkey, Richard G.
REGISTRATION NUMBER: 32,629
REFERENCE/DOCKET NUMBER: 920
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
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                              Local Similarity hes 10; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
                                                                                                                                                           TYPE: amino acid
                                                                                                                                                                                                                                                                                           NAME: Logan, April C. REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: PCT/US95/16415 FILING DATE: 13-DEC-1995
                                                                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDIUM TYPE:
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 1 VMAGVGSPYV 10
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IVENTION: IN VIVO ACTIVATION OF TUMOR-SPECIFIC
VENTION: CYTOTOXIC T CELLS
                                Conservative
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                                            Score 51; DB 4;
Pred. No. 0.0026;
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                                Mismatches
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                              Indels
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1 VMAGVGSPYV 10

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US-08-467-083-44
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Sequence 44, Application US/08467083
PATENT NO. 5726023
GENERAL INFORMATION:
APPLICANT: Cheever, Martin A.
APPLICANT: D1sis, Mary L.
TITLE OF INVENTION: IMMUNE REACT
                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                           Query Match
Best Local :
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SEQUENCE CHARACTERISTICS:
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APPLICANT: Grey, Howard M.
APPLICANT: Sette, Alessandro
APPLICANT: Sette, Alessandro
APPLICANT: Celis, Esteban
TITLE OF INVENTION: HLA Binding peptides and Their
TITLE OF INVENTION: Uses
NUMBER OF SEQUENCES: 1254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
NAME: Weber, Ellen Lauver
REGISTRATION NUMBER: 32,762
REFERENCE/DOCKET NUMBER: 018623-005030US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OPERATING SYSTEM: DOS
SOFTWARE: FASTSED for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/159,339A
FILING DATE: 29-NOV-1993
CLASSIFICATION: 424
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MEDIUM TYPE: Diskette
COMPUTER: IBM Compatil
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CITY: San Francisco
CTATE: CA
TTOA
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ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Eighth Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
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FILING DATE: 07-AUG-1992
APPLICATION NUMBER: US 08/027,746
FILING DATE: 05-MAR-1993
APPLICATION NUMBER: US 08/103,396
FILING DATE: 06-AUG-1993
                                                                                                                                                                                                                                                                                                                                                                                                                          STRANDEDNESS
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                                                                                                                                                                                                                                                                                         Local
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9; Conser
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100.0%; Pred. No. 0.
tive 0; Mismatches
   IMMUNE REACTIVITY TO HER-2/NEU PROTEIN
                                                                                                                                                                                                                                                                                           DB 3;
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Patent No. 5801005
GENERAL INFORMATION:
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: (206) 682-6031
TELEX: 3723836 SEEDANBERRY
INFORMATION FOR SEQ ID NO: 44:
                                                                                                                                                                                                                                                                      APPLICANT: Cheever, Martin A. APPLICANT: Disis, Mary L. TITLE OF INVENTION: IMMUNE REACTITLE OF INVENTION: FOR DIAGNOS TITLE OF INVENTION: HER-2/neu C NUMBER OF SEQUENCES: 69
                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/414,417
FILING DATE: 06-JUN-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 06-JUN-19
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MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: 92
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
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OPERATING SYSTEM:
                                                                                                                                                              COUNTRY:
                                                                                                                                                                                                    STREET: 6300 CCITY: Seattle
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE:
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                  APPLICATION NUMBER:
                                                                                                                                                                                                                                        ADDRESSEE:
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RATION NUMBER: 32,629
                                                                                                                                                                               Washington
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                                                                                                                                                                                                                   6300 Columbia
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MBER: US/08/414,417B
31-MAR-1995
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                                                                                                                                                                                                                                                                                         IMMUNE REACTIVITY TO HER-2/neu PROTEIN
FOR DIAGNOSIS AND TREATMENT OF MALIGNANCIES IN WHICH THE
HER-2/neu ONCOGENE IS ASSOCIATED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FOR DIAGNOSIS AND TREATMENT OF MALIGNANCIES IN WHICH THE HER-2/NEU ONCOGENE IS ASSOCIATED
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100.0%; Pred. No.
Live 0; Mismatc
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                                                                                                                                                                                                                     Center, 701 Fifth Avenue
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 44,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
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APPLICANT: Cheever, Martin A.

APPLICANT: Disis, Mary L.

TITLE OF INVENTION: IMMUNE REACTIVITY TO HER-2/neu PROTEIN

TITLE OF INVENTION: FOR DIAGNOSIS AND TREATMENT OF MALIGNANCIES IN WHICH THE

TITLE OF INVENTION: HER-2/neu ONCOGENE IS ASSOCIATED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: (206) 682-6031
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 15 amino acids
                                               Matches
                                                                                                                                                                                                  TELEPHONE: (206) 622-4900
TELEFAX: (206) 682-6031
INFORMATION FOR SEQ ID NO: 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER: 92
TELECOMMUNICATION INFORMATION:
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ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/06
FILING DATE: 07-UN-1995
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: Seattle washing
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                                                                                                                                                                                                                                                              NAME: Sharkey, Richard G. REGISTRATION NUMBER: 32,629 REFERENCE/DOCKET NUMBER: 92
                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE:
                                             Local Similarity nes 7; Conserv
                                                                                                                                         TOPOLOGY:
                                                                                                                                                                     LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE:
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4 GVGSPYV 10
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)GY: linear
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                                                                                                                                        amino acid
)GY: linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Washington
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                                                                                                                                                                        15 amino acids
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6300 Columbia Center,
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                                          74.5%; 5c.
100.0%; Pr
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                                                               Score 38; pred. No.
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0.71;
                                                             DB 2; Length 15; 0.71;
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Patent No. 5
                                                                                                                                                                                                        Sequence 44, Application US/08466680B Patent No. 6075122 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                            Matches
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Best Local :
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                                                                                                            APPLICANT: Cheever, Martin APPLICANT: Disis, Mary L. TITLE OF INVENTION: IMMUNE TITLE OF INVENTION: FOR DI. TITLE OF INVENTION: HER-2/NUMBER OF SEQUENCES: 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/468,545B
FILING DATE: 06-JUN-1995
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Sharkey, Richard G.
REGISTRATION NUMBER: 32,629
REFERENCE/DOCKET NUMBER: 920010.448C5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Cheever, Martin A. APPLICANT: Disis, Mary L. TITLE OF INVENTION: IMMUNE RE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
LENGTH: 15 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION:
                                                                                               CORRESPONDENCE ADDRESS:
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OPERATING SYSTEM: PC-DOS/MS-DOS
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STATE: Washing
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             COUNTRY:
                                            CITY: Seattle
                                                                STREET:
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                                                                               ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                          l Similarity
7; Conserva
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98104-7092
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00 Columbia Center,
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                                                                               Seed and Berry LLP
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                                                                                                                                                                                                                                                                                                                                                                                                             74.5%;
                                                                                                              IMMUNE REACTIVITY TO HER-2/neu PROTEIN FOR DIAGNOSIS AND TREATMENT OF MALIGNANCIES IN WHICH THE HER-2/neu ONCOGENE IS ASSOCIATED 69
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Pred. No.
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0.71;
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COMPUTER READABLE FORM:

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                                                                                                         APPLICATION NUMBER: US/08/817,926
FILING DATE: 09-MAY-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/JP96/02597
FILING DATE: 12-SEP-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 234133/1995
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                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     tent No.
                     FILING DATE: 29-FEB-1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                            SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: PRÔMOTER/TERMINATOR FOR CANDIDA BOIDINII TITLE OF INVENTION: FORMATE DEHYDROGENASE GENE NUMBER OF SEQUENCES: 51
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APPLICANT:
APPLICANT:
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APPLICANT:
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LENGTH: 15 amino acids
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REFERENCE/DOCKET NUMBER: 920010.448C4
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: Sharkey, Richard G.
REGISTRATION NUMBER: 32,6
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APPLICATION NUMBER: US/0
FILING DATE: 06-JUN-1995
                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: Washington STATE: D.C.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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3000 K Street, N.W., Suite 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Iwamatsu, Akihiro
Kato, No. 6001590uo
Sakai, Yasuyoshi
VPNTTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Komeda, Toshihiro
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Tamai, Yukio
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Stephen A.
                                                                                                 12-SEP-1995
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                                                      JP 42536/1996
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 10, Application US/08725736D Patent No. 5831016
GENERAL INFORMATION:
APPLICANT: WANG, R.F.; ROSENBERG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/08,
FILING DATE: 04-OCT-1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/59;
FILING DATE: 09-FEB-1996
                                                                                                                      TELEFAX: (212) 751-6849
TELEX: 421792
INFORMATION FOR SEQ ID NO: :
SEQUENCE CHARACTERISTICS:
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TELEX: 904136
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: 20
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 758-4800
                                               MOLECULE TYPE:
                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
NAME: DOROTHY R. AUTH
                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM: MEDIUM TYPE: FLOPPY
                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: WORDPERFECT CURRENT APPLICATION DATA:
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TITLE OF INVENTION: A HUMAN TUMOR ANTIGEN RECOGNIZED BY CYTOTOXIC T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)672-5300
TELEFAX: (202)672-5399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS
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LENGTH: 18 amino acids
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                                                    STRANDEDNESS: SINC
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CITY: N
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OPERATING SYSTEM:
NAME/KEY: TRP-2 PEPTIDE VARIANT
                              DESCRIPTION: PEPTIDE
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                                                                                                           ENGTH:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NEW YORK
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04-OCT-1996
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                                                                            SINGLE
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Pred. No. 6.3;
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; IDENTIFICATION METHOD: ; OTHER INFORMATION: US-09-162-368B-10
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US-09-162-368B-10
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               Query Match
Best Local Similarity
Matches 5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 10, Application US/09162368B Patent No. 6083703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local S
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                                                                                                                                                                                                                                                                                    TELEX: 421792
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                           ATTORNEY_AGENT INFORMATION:

NAME: KATHRYN M. BROWN
REGISTRATION NUMBER: 34,556
REFERENCE/DOCKET NUMBER: 2026
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 758-4800
TELEPAX: (212) 751-6849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATA:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/599,602
FILING DATE: 09-FEB-1996
                                                                                                                                                                 FEATURE:
                                                                                                                                                                                               TOPOLOGY: U
MOLECULE TYPE:
                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/7:
FILING DATE: 04-0CT-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: FLOPPY DISK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET: 345
STREET: NEW YORK
CITY: NEW YORK
CTATE: NEW YORK
TGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                  NAME/KEY: TRP-2 PEPTIDE VARIANT LOCATION:
                                                                                                                                                                              DESCRIPTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: FILING DATE: 28-SEP CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: MICROSOFT WORD 97
                                                                                                                                                                                                                          STRANDEDNESS:
                                                                                                                                                                                                                                                       LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE:
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mes 5; Conserv
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                                                                                                                                                                                                                      AMINO ACID
SINGLE
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               Conservative
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IVENTION: IDENTIFICATION OF TRP-2 AS

VENTION: A HUMAN TUMOR ANTIGEN RECOGNIZED BY CYTOTOXIC T
                                                                                                                                                                                                             UNKNOWN
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                                                                                                                                                                               PEPTIDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          UMBER: US/09/162,368B
28-SEPT-1998
                          56.9%;
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62.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              08/725,736
                                                                                                                                                                                                                                                                                    10:
            Score 29; DB 3;
Pred. No. 1.2e+0;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                          2026-4243US1
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Pred. No. 1.2e+05;
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      ..2e+05;
2;
                                       Length 9;
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          Indels
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         0;
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         Gaps
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         0;
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                                                                US-08-412-865-5
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Sequence 5, Application US/08412865
Patent No. 5610047
GENERAL INFORMATION:
APPLICANT: MARUTA, Kazuhiko
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; LENGTH: 10 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-172-707-5
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; Sequence 5, Ap
; Patent No. 545
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                                                                 Matches
                                                                                   Query Match
Best Local
                                                                                                                                                                                                                                                 TELEX: 248633
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 362131/1992
FILING DATE: 28-DEC-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 265416/1993
FILING DATE: 30-SEP-1993
                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-628-5197
TELEFAX: 202-737-3528
                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 30-SEP-1993
ATTORNBY/AGENT INFORMATION:
NAME: TOWNSEND, G. Kevin
REGISTRATION NUMBER: 34,033
REFERENCE/DOCKET NUMBER: MARUTA=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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STREET: Washington
STATE: D.C.
TICA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: SUGIMOTO, Toshioutile APPLICANT: MIYAKE, Toshio TITLE OF INVENTION: NON-REDUCING SACCHARIDE-FORMING ENZYME, NUMBER OF SEQUENCES: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: BROWDY AND NEIMARK
STREET: 419 Seventh Street, N.W.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: MARUTA, Kazuhiko
APPLICANT: KUBOTA, Michio
                                                                               Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/08/172,707
FILING DATE: 12-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0
2 GRGSPY
                              4 GVGSPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 LAGPGRPY
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                                                               Similarity 5; Conserv
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                              9
                                                               Conservative
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SUGIMOTO, Toshiyuki
MIYAKE, Toshio
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                                                                              52.9%;
83.3%;
                                                        Score 27; DB Pred. No. 39; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Suite 300
                                                                                            DB 1;
                                                                                          Length 10;
                                                        0,
                                                       Gaps
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0;

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Query Match
Best Local Similarity
Watches 5; Conserve
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TELECOMUNICATION:
ATTORNEY/AGENT INFORMATION:
NAME: TOWNSEND, G. KeV1n
REGISTRATION NUMBER: 34,033
REFERENCE/DOCKET NUMBER: MARUTA-1
TELECOMUNICATION INFORMATION:
TELECOMUNICATION 1NFORMATION:
TELECOMUNICATION 202-628-5197
TELECOMUNICATION 3528
                                                                                                                                                                                                             Sequence 5, Application US/08476505 Patent No. 5677442 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/08/412,865
FILING DATE: 29-MAR-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/172,707
FILING DATE: 12-DEC-1993
APPLICATION NUMBER: JP 362131/1992
PRIOR APPLICATION DATA:
APPLICATION DATA: JP 265416/1993
APPLICATION NUMBER: JP 265416/1993
FILING DATE: 30-SEP-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEX: 248633
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS
SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: BROWDY AND NEIMARK
STREET: 419 Seventh Street, N.W., Sulte 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                             APPLICANT: MARUTA, Kazuhiko
APPLICANT: KUBOTA, Michio
APPLICANT: SUGIMOTO, TOShiyuki
APPLICANT: MIYAKE, TOShio
TITLE OF INVENTION: NON-REDUCING SACCHARIDE-FORMING ENZYME,
TITLE OF INVENTION: AND ITS PREPARATION AND USES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS: single TOPOLOGY: linear MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: NON-REDUCING SACCHARIDE-FORMING ENZYME, TITLE OF INVENTION: AND ITS PREPARATION AND USES
                                                          NUMBER OF SEQUENCES: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: 419 Seve CITY: Washington STATE: D.C.
STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE:
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                                          ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                       2 GRGSPY 7
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amino acid
  Washington
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                      419 Seventh Street, N.W., Suite 300
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MIYAKE, Toshio
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                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                          BROWDY AND NEIMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                     52.9%;
83.3%;
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Pred. No. 39;
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LUNO:
ACTERISTICS:
10 amino acids
amino acids
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: per
US-08-476-505-5
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Best Local S
Matches 5
                                                                                                                                                                                   APPLICANT: KUBOTA, Michio
APPLICANT: KUBOTA, Michio
APPLICANT: SUGIMOTO, Toshio
APPLICANT: MIYAKE, TOShio
APPLICANT: MIYAKE, TOShio
TITLE OF INVENTION: NON-REDUCING SACCHARIDE-FORM
TITLE OF INVENTION: AND ITS PREPARATION AND USES
NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
ADDRESSE: BROWDY AND NEIMARK
STREET: 419 Seventh Street, N.W., Suite 300
                                                                                                                                                                                                                                                                                                                                                                                      Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STATE: D.C.
COUNTRY: USA
ZIP: 20004
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy d.
                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER: MA TELECOMMUNICATION INFORMATION: TELEPHONE: 202-638-5197 TELEFAX: 202-737-3528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: JP 362131/1992 FILING DATE: 28-DEC-1992 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/172,707
FILING DATE: 12-DEC-1993
                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                      STREET: 415 CITY: Washington STATE: D.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 30-SEP-1993 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION DATA:
              SOFTWARE: PatentIn Rel CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELLETAX: 24863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/0 FILING DATE: 07-JUN-1995 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity 83.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REGISTRATION NUMBER:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4 GVGSPY 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 GRGSPY 7
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5716838
                                                                                                                       20004
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                                                                                                                                                                                                                                                             NON-REDUCING SACCHARIDE-FORMING ENZYME AND ITS PREPARATION AND USES
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US/08/487,396
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PRIOR APPLICATION DATA:

CLASSIFICATION:

07-JUN-1995

APPLICATION NUMBER: 08/1 FILING DATE: 27-DEC-1993

APPLICATION NUMBER:

08/172,707 -1993 JP 362131/1992

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Best Local Similarity
Matches 5; Conserv
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FILING DATE: 30-SEP-1993
ATTORNEY/AGENT INFORMATION:
NAME: TOWNSEND, G. Keyin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-628-5197
TELEFAX: 202-737-3528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
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                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/0:
APPLICATION NUMBER: 12-DEC-1993
                                                                                                                                                                                 SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
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                            PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: MARUTA=1
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                                                                                                                                                                                                                                                                                                                              STREET: 412 CTTY: Washington
                                                                                                                                                                                                                                                                                                       STATE: D.C.
COUNTRY: USA
                                                                                                                                                                                                                                     COMPUTER:
                                                APPLICATION NUMBER: JP 362131/1992 FILING DATE: 28-DEC-1992
                                                                                                                                   CLASSIFICATION:
                                                                                                                                                     APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                     COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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APPLICATION NUMBER: JP 265416/1993 FILING DATE: 30-SEP-1993
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MIYAKE, Toshio
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83.3%;
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                                                                                                 US/08/172,707
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Pred. No.
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39;
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US-08-769-143-5
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Best Local
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TELEX: 248633
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                            REFERENCE/DOCKET NUMBER: 34,033
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-628-5197
TELEPAX: 202-777
                                                                                                                                      APPLICATE: 28-DECILIANT DATA:
FILING DATE: 28-DECILIANT DATA:
PRIOR APPLICATION NUMBER: JP 265416/1993
APPLICATION NUMBER: JP 265416/1993
APPLICATION NUMBER: 30-SEP-1993
                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
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                                                                                                        FILING DATE: 30-SEP-1993
ATTORNEY/AGENT INFORMATION:
NAME: TOWNSEND, G. Kevin
REGISTRATION NUMBER: 34,0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION:
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                  TELLEFAX: 202
TELEFAX: 248633
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5; Conservative
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KUBOTA, Michio
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83.3%;
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                                                                                              MARUTA=1

    Mismatches

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US-08-725-736D-9
: Sequence 9, Application US/08725736D
: Patent No. 5831016
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                                                                                                                                     Query Match
Best Local Similarity
"herhes 5; Conserve
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Best Local Similarity bo...
""tches 5; Conservative
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TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                     NAME: Brook, David E.
REGISTRATION NUMBER: 22,592
REFERENCE/DOCKET NUMBER: MIT
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-861-6240
                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08
FILING DATE: 28-WAY-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: tRITILE OF INVENTION: PAY NUMBER OF SEQUENCES: 2: CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                    TYPE: amino acids
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                                                                                              1 SGYDSPYV 8
                                                                                                                       3 AGVGSPYV 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ZIP: 02173-4799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: Lexington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET:
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62.5%;
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Pred. No.
                                                                                                                                                  Mismatches
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39;
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RESULT 24
US-09-162-368B-9
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Best Local Similarity
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                                                                                                            Sequence 9. Application US/09162368B
Patent No. 6083703
GENERAL INFORMATION: ROSENBERG, S. A.
APPLICANT: WANG, R.F.; ROSENBERG, S. A.
TITLE OF INVENTION: IDENTIFICATION OF TRP-2 AS
                                                     TITLE OF INVENTION: IDE
TITLE OF INVENTION: A H
TITLE OF INVENTION: LYM
NUMBER OF SEQUENCES: 31
CORRESPONDENCE ADDRESS:
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TELEX: 421792
INFORMATION FOR SEQ ID NO:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 20
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 758-4800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: WORDPERFECT 5.1 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
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APPLICATION NUMBER: 08/599,602
FILING DATE: 09-FEB-1996
ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY:
LOCATION:
                          STREET:
                 CITY:
                                            ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: AMINO ACID
STRANDEDNESS: SIN
TOPOLOGY: UNKNOWN
                                                                                                                                                                                                                                                                                    2 MAGVGSPY 9
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FILING DATE: 04-OCT-1996
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OPERATING SYSTEM: PC-DOS/MS
                                                                                                                                                                                                                                                        1 LSGPGRPY 8
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NEW YORK
                            345 PARK AVENUE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MORGAN & FINNEGAN, L.L.P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FLOPPY DISK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SINGLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R.F.; ROSENBERG, S. A.
                                                                                    LYMPHOCYTES
                                                                                                 A HUMAN TUMOR ANTIGEN RECOGNIZED BY CYTOTOXIC
                                                                                                                                                                                                                                                                                                                             51.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LYMPHOCYTES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IDENTIFICATION OF TRP-2 AS A HUMAN TUMOR ANTIGEN RECOGNIZED BY CYTOTOXIC T
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9:
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                                                                                                                                                                                                                                                                                                                             Score 26;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2026-4243
                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                            . 1.2e+05;
2;
                                                                                                                                                                                                                                                                                                                                          Length 9;
                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                          Gaps
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PLOPPY DISK

OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: MICROSOFT WORD 97
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/n
FILING DATE: 28-7
CLASSIFICATION PORTOR

UMBER: US/09/162,368B 28-SEPT-1998

COUNTRY:

APPLICATION NUMBER: 08/725,736
FILING DATE: 04-OCT-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/599,602
FILING DATE: 09-FEB-1996

FILING DATE: 09-FEB-1990
ATTORNEY/AGENT INFORMATION:
NAME: KATHRYN M. BROWN
24

REGISTRATION NUMBER:

34,556

2026-4243US1

PRIOR APPLICATION DATA:

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WANG, R.F.; ROSENBERG, S. A.
IVENTION: IDENTIFICATION OF TRP-2 AS
VENTION: A HUMAN TUMOR ANTIGEN RECOGNIZED BY CYTOTOXIC T
                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
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OTHER INFORMATION:
US-09-162-368B-28
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 26
US-08-630-916A-11
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Best Local S
Matches 4
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                                                                                                                                                                                                                                                                                                                                                                                                                                      Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: [1]
FILING DATE: 28-SEPT.
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 11,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 08/7:
FILING DATE: 04-OCT-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 09-FEB-1996
ATTORNEY/AGENT INFORMATION:
NAME: KATHRYN M. BROWN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 758-4800
TELEFAX: (212) 751-6849
TELEX: 421792
                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: KATHRYN M. BROWN
REGISTRATION NUMBER: 34,
REFERENCE/DOCKET NUMBER:
                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: FLORE PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATION DATA:
CURRENT APPLICATION NUMBER: US/08/630,916A
FILING DATE: 03-APR-1996
FILING DATE: 03-APR-1996
                                                                                                                                                                                                                                                                                                                                       APPLICANT: PITOZZI, Gregorio
APPLICANT: Ray, Brian K.
APPLICANT: FOWLKES, Dana M.
APPLICANT: FOWLKES, Dana M.
TITLE OF INVENTION: IDENTIFIC
TITLE OF INVENTION: POLYPEPTI
                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DESCRIPTION: PEPTIDE
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                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY:
FILING DATE: 03-APR-1996
CLASSIFICATION: 435
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
AMME: MISROCK, S. LESLIE
REGISTRATION NUMBER: 18,872
REFERENCE/DOCKET NUMBER: 1101-203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCATION:
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1 LLGPGAPY 8
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                                                                                                                                                                                                            COUNTRY: United States ZIP: 10036-2711
                                                                                                                                                                                                                                               STATE:
                                                                                                                                                                                                                                                           CITY: New
                                                                                                                                                                                                                                                                             STREET:
                                                                                                                                                                                                                                                                                              ADDRESSEE:
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                                                                                                                                                                                                                                               New York
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1155 Avenue of the Americas
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                                                                                                                                                                                                                                                                                                                              IDENTIFICATION AND ISOLATION OF NOVEL POLYPEPTIDES HAVING WW DOMAINS AND METHODS OF USING SAME 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    34,556
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pred. No. 1.2e+05;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 9;
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US-09-162-368B-9

IDENTIFICATION METHOD: OTHER INFORMATION:

NAME/KEY: TRP-2 PEPTIDE VARIANT

TELEFAX: (212) 751-68: TELEX: 421792 INFORMATION FOR SEQ ID NO:

SEQUENCE CHARACTERISTICS:

ENGTH:

TYPE: AMINO ACID STRANDEDNESS: SIN

SINGLE

MOLECULE TYPE:

COPOLOGY:

UNKNOWN

DESCRIPTION:

PEPTIDE

REFERENCE/DOCKET NUMBER: 20
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 758-4800
TELEFAX: (212) 751-6849

Query Match
Best Local Similarity
Matches 4; Conserv

Conservative

2

51.0%;

score 26; DB 3; pred. No. 1.2e+05; Mismatches

DB 3;

Length 9; Indels

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RESULT 25 US-09-162-368B-28

sequence 28, Application US/09162368B Patent No. 6083703
GENERAL INFORMATION:

TITLE OF INVENTION: IDENTIFICAT TITLE OF INVENTION: A HUMAN TUM A HUMAN TUM LYMPHOCYTES

NUMBER OF SEQUENCES:

APPLICANT:

CORRESPONDENCE ADDRESS:
ADDRESSEE: MORGAN & FINNEGAN, L.L.P.
STREET: 345 PARK AVENUE
CITY: NEW YORK

COMPUTER: TIM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: MICROSOFT WORD 97
CURRENT APPLICATION DATA:

COMPUTER READABLE FORM:
MEDIUM TYPE: FLOPPY DISK

COUNTRY: UZIP: 10154

NEW YORK

USA

TELECOMMUNICATION INFORMATION: TELEPHONE: (212) 790-9090

TELEPHONE:

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; TYPE: amino acid

STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: peptide

US-09-082-737-12
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                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:

NAME: White, John P.

REGISTRATION NUMBER: 28,678
REFERENCE/DOCKET NUMBER: 0575/55311
REFERENCE/DOCKET NUMBER: 0575/55311
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 278-0400
TELEPAX: (212) 278-0400
TELEFAX: (212) 391-0525
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
LENGTH: 8 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 51.0%;
Best Local Similarity 57.1%;
Matches 4; Conservative
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                                                                                Query Match
Best Local S
                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: (212) 896-8864/9741 NFORMATION FOR SEQ ID NO: 11:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 16 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: unknown MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Minden, Audrey
TITLE OF INVENTION: PAK4; A No. 6013500el Gene Encoding A Serine/
TITLE OF INVENTION: Threonine Kinase
NUMBER OF SEQUENCES: 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: New York
STATE: New Yorl
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                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION:
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                                                                 Local Similarity 80.
                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/09/082,737
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE:
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|VGTPY 5
                                VGSPY 9
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Y: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 E: Cooper & Dunham LLP
1185 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16 amino acids
                                                                                   49.0%;
80.0%;
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                                                                                   Score 25; DB 3; Pred. No. 1.2e+05;
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                                                                     Mismatches
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                                                                                                                                                                       RESULT 29
US-08-725-736D-14
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Patent No. 5831016
Patent No. 5831016
GENERAL INFORMATION:
APPLICANT: WANG, R.F.; ROSENBERG, S. A.
TITLE OF INVENTION: IDENTIFICATION OF TRP-2 AS
TITLE OF INVENTION: A HUMAN TUMOR ANTIGEN RECOGNIZED BY CYTOTOXIC T
                                                                                                          Sequence 14, Application US/08725736D Patent No. 5831016
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                Query Match 49.0
Best Local Similarity 50.0
Matches 4; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: (212) 751-68
TELEX: 421792
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REGISTRATION NUMBER: 36,434
REFERENCE/DOCKET NUMBER: 20
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 758-4800
TELEFAX: (212) 751-6849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/599,602
FILING DATE: 09-FEB-1996
ATTORNEY/AGENT INFORMATION:
NAME: DOROTHY R. AUTH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WORDPERFECT 5.1
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: FLOPPY DISK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: IDENTIFICAT:
TITLE OF INVENTION: A HUMAN TUM
TITLE OF INVENTION: LYMPHOCYTES
          APPLICANT: WANG, R.F.; ROSENBERG, S. A.
TITLE OF INVENTION: IDENTIFICATION OF TRP-2 AS
TITLE OF INVENTION: A HUMAN TUMOR ANTIGEN RECOGNIZED BY CYTOTOXIC T
TITLE OF INVENTION: LYMPHOCYTES
NUMBER OF SEQUENCES: 20
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CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE:
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CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: FILING DATE: 04-OCT CLASSIFICATION: 435
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: TRP-2 PEPTIDE VARIANT LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: UNKNOWN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: AMINO ACID
STRANDEDNESS: SIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE: MORGAN & FINNEGAN, L.L.P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DESCRIPTION: PEPTIDE
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                                                                                                                                                                                                                                                       1 LVGPGRPY 8
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NEW YORK
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                                                                                                                                                                                                                                                                                                                                                     49.0%;
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                                                                                                                                                                                                                                                                                                                                    1; Mismatches
                                                                                                                                                                                                                                                                                                                                                     Score 25; DB 2;
Pred. No. 1.2e+05
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                                                                                                                                                                                                                                                                                                                                                                       Length 9;
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                                                                                                                                                                                                                                                                                                                                    Gaps
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ADDRESSEE:

E: MORGAN & FINNEGAN, L.L.P. 345 PARK AVENUE

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                                                                                                                                                                                                                                                                         Sequence 36, Application US/08318856A Patent No. 5972351
                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                          GENERAL INFORMATION:
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OPERATING SYSTEM: PC-DOS/MS
SOFTWARE: WORDDERFECT 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/7
FILING DATE: 04-OCT-1996
CLASSIFICATION: 435
                                                                                                                                                                         APPLICANT: Adrian V.
TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk, 3.5 in
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                             CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
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ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: (
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TELEX: 421792
                                                                                                                            STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IDENTIFICATION METHOD: OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRANDEDNESS: SING TOPOLOGY: UNKNOWN
                                                                             COUNTRY:
                                                                                                             CITY: Washington
                                                                                                                                                ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DESCRIPTION: PEPTIDE
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                                                                                                                              E: Wenderoth, Lind & Ponack, L.L.P. 2033 K Street, N.W., Suite 800
                                                                                 U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    USA
                                                                                                                                                                                                                                         Adrian V.S. Hill, et al.
                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
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SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                      PLASMODIUM FALCIPARUM MHC CLASS I-
RESTRICTED CTL EPITOPES DERIVED FROM PRE-ERYTHROCYTIC STAGE
ANTIGENS (AS AMENDED)
                                                                                                                                                                                                                                                                                                                                                                                                                                                    49.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 25; DB 2;
Pred. No. 1.2e+05;
                                 3.5 inch,
                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                  1.44 mb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
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RESULT 31
US-09-162-368B-8
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Best Local Similarity
Matches 5; Conserv
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APPLICANT: WANG, R.F.; ROSENBERG, S. A.
                  CLASSIFICATION: 530
PRIOR APPLICATION NUMBER: 08/725,
APPLICATION NUMBER: 08/725,
FILING DATE: 04-OCT-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/599,
ETILING DATE: 09-FEB-1996
ATTORNEY/AGENT INFORMATION:
NAME: KATHEYN M. BROWN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPHONE: (202) 721-8
TELEFAX: (202) 721-82:
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC COMPATIBLE OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: MICROSOFT WORD 97 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: FLOPPY DISK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: IDENTIFICATION OF TRP-2 AS
TITLE OF INVENTION: A HUMAN TUMOR ANTIGEN RECOGNIZED BY CYTOTOXIC T
TITLE OF INVENTION: LYMPHOCYTES
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LENGTH: 9 amino acid residues
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APPLICATION NUMBER: GB 92 1
FILING DATE:
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ATTORNEY/AGENT INFORMATION:
NAME: Lee Cheng
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PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: FILING DATE: 28-SE
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REFERENCE/DOCKET NUMBER: 26:
REGISTRATION NUMBER:
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83.3%;
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                                                                                                                                    08/599,602
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Pred. No.
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REFERENCE/DOCKET NUMBER: 2026-4243US1

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 50.0
Matches 4; Conservative
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/725,736
FILING DATE: 04-OCT-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/599,602
FILING DATE: 09-FEB-1996
ATTORNEY/AGENT INFORMATION:
                                                                               INFORMATION FOR SEQ ID NO:
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TELEX: 421792
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                  REGISTRATION NUMBER: 34,556
REFERENCE/DOCKET NUMBER: 20:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 758-4800
SEQUENCE CHARACTERISTICS:
LENGTH: 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: MICROSOFT WORD 97
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/162,368B
FILING DATE: 28-SEPT-1998
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MEDIUM TYPE: FLOPPY DISK
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CORRESPONDENCE ADDRESS:
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                                                                               TELEFAX: (212) 751-6849
TELEX: 421792
RMATION 721-2014 AND TOWN 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: MICROSOFT WORD 97
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STATE: NEW YORK
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IDENTIFICATION METHOD:
OTHER INFORMATION:
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STRANDEDNESS: SING
TOPOLOGY: UNKNOWN
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ZIP: 10154
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 MAGVGSPY 9
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                                                                                                                                                                                                                                                                                                                                             KATHRYN M. BROWN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        345 PARK AVENUE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MORGAN & FINNEGAN, L.L.P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R.F.; ROSENBERG, S.
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Pred. No. 1.2e+05;
1; Mismatches 3
                                                                                                                                                                                                                                                                          2026-4243US1
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RESULT 33
US-09-162-368B-31
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Best Local Similarity
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                                                                                                                                                                        INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                  REGISTRATION NUMBER: 34,556
REFERENCE/DOCKET NUMBER: 20
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 758-4800
                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION UMBER: 08/725,736
FILLING DATE: 04-0CT-1996
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: MICROSOFT WORD 97 CURRENT APPLICATION DATA:
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MEDIUM TYPE: FLOPPY
                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 08/59
FILING DATE: 09-FEB-1996
ATTORNEY/AGENT INFORMATION:
NAME: KATHRYN M. BROWN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: WANG, R.F.; ROSENBERG, S. A.
TITLE OF INVENTION: IDENTIFICATION OF TRE-2 AS
TITLE OF INVENTION: A HUMAN TUMOR ANTIGEN RECOGNIZED BY CYTOTOXIC T
TITLE OF INVENTION: LYMPHOCYTES
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MOLECULE TYPE:
                                                 MOLECULE TYPE:
DESCRIPTION: PEPTIDE
                                                                                                                                                      SEQUENCE CHARACTERISTICS:
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 NAME/KEY:
LOCATION:
                                                                                  STRANDEDNESS: UNK
TOPOLOGY: UNKNOWN
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                                                                                                                AMINO ACID
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                                                                                                                                                                                                     (212) 751-6849
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TRP-2 peptide Variant 2 to 9
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Pred. No. 1.2e+05
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; LOCATION: 1..13
; OTHER INFORMATION: /label= beta-C2-2
US-08-594-447-6
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                                                                Matches
                                                                                Query Match
Best Local
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: PM PC COMPATION
OPERATING SYSTEM: PC-POS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/594,447
FILING DATE: 31-VAN-1996
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                         NAME: MUTASHIGE, KATE H.
REGISTRATION NUMBER: 29,959
REFERENCE/DOCKET NUMBER: 22:
TELECOMMUNICATION INFORMATION:
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CORRESPONDENCE ADDRESS:
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APPLICANT: Napolitano, Eugene W.
APPLICANT: Voronova, Anna F.
TITLE OF INVENTION: METHODS FOR IDENTIFYING
TITLE OF INVENTION: BLOCKTHE INTERACTION OF
                                                                                                                                                                                                                          MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION:
                                                                            Local Similarity
                                                                                                                                                                                                                                             TOPOLOGY: linear
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CITY: Washington
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OTHER INFORMATION: Fir
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GLSDPYV 11
                             GVGSPYV 10
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(202) 822-0168
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                                                               Conservative
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57.1%;
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50.0%;
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First Xaa is Ile, Ser,
Leu, Val; Second Xaa is Lys or Arg
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                                                                            Score 25;
Pred. No.
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Pred. No. 1.2e+05;
                                                             Mismatches
                                                                            .1e+02;
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                                                                                          Length 13;
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Search completed: December 12, 2000, 02:44:01 Job time: 5412 sec
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; OTHER INFORMATION: /label= beta-C2-2
US-08-541-964-5
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                                                                                                                                                                       Query Match
Best Local S
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                                                                                                                                                          Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEX: 90-4030 MRSNFOERSWSH INFORMATION FOR SEQ ID NO: 5:
                                                                                                                                                                                                                                                                                                                                                  TYPE: amino acids
STRANDEDNESS: sing?
TOPOLOGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REGISTRATION NUMBER: 29,959
REFERENCE/DOCKET NUMBER: 22
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 887-1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Murashige, Kate H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Kauvar, Lawrence M.
APPLICANT: Napolitano, Eugene W.
TITLE OF INVENTION: A RAPID SCREENING METHOD FOR EFFECTORS
TITLE OF INVENTION: OF SIGNAL TRANSDUCTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
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CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE:
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                                                                                                                                                      Local Similarity les 4; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/0 FILING DATE: 10-OCT-1995 CLASSIFICATION: 435
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57.1%;
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                                                                                                                                                                       Score 25; DB 1;
Pred. No. 1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22550-20025.23
                                                                                                                                                        Mismatches
                                                                                                                                                                                        Length 13;
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GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd

protein - protein search, using sw model

8

Run on: December 11, 2000, 23:07:30; Search time 47.49 Seconds (without alignments) 7.200 Million cell updates/sec

Title: Perfect score: US-08-860-232-12 51

Scoring table: Sequence: BLOSUM62
Gapop 10.0 , Gapext 0.5 1 VMAGVGSPYV 10

Searched: 268485 seqs, 34193795 residues

Total number of hits satisfying chosen parameters:

127583

Minimum DB Maximum DB seq length: 0 length: 20

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 75 summaries

Database A_Geneseq_36:*

10: 11: 12: 13: 13: 14: 15: 16: 16: 17: 18: 19: 20: /SIDS6/gcgdata/geneseq/geneseqp/AA1980.DAT:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

12	11	10	9	8	7	6	U	4	·ω	2	1	No.	Result
33	47	47	47	47	47	51	51	51	51	51	51	Score	
64.7	92.2	92.2	92.2	92.2	92.2	100.0	100.0	100.0	100.0	100.0	100.0	: -	Ouerv
15	10	10	9	9	9	15	10	10	10	10	10	Length	
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Y98860	Y45527	Y37958	Y46478	Y46413	Y46001	T98861	W70071	W77132	W36826	R97508	R61525	ID	
HLA class II bindi	Immunogenic peptid	Human cERB2 oncoge	Immunogenic peptid	Immunogenic peptid	Immunogenic peptid	HLA class II bindi	HER-2/neu derived	HER-2/neu syntheti	Immunogenic peptid	Cytotoxic T lympho	Peptide fragment (Description	

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Plasmodium falcipa Fluorogenic protea Human PAKS-derived Human p21-protein Human p55 peptide. Bovine "polyprollin Peptide #2. Synth HJ loop peptide HJ Immunogenic peptid TRP-2 derived pote TRP-2 derived pote

Protein kinase C-b T cell antigen rec Helper T-cell clas Helper T-cell clas

Helper T-cell pept Helper T-cell pept Helper T-cell pept Human SULU1-derive

Peptide #2 used in Peptide #6 used in Peptide #26 used i

TRP-2 derived pote TRP-2 derived pote Rabphilin-3A fragm Haemophilus influe

Human

Human prostate car

PAK65 kinase

TRP-2 derived pote Peptide recognitio. Hexapeptide having Cyclic antiarrhyth

TRP-2 derived pote HLA class II bindi TRP-2 derived pote

ALIGNMENTS

Calcitonin derived Ol2 antigen proteo TRP-2 derived pote Immunogenic peptid Immunogenic peptid Human leukocyte an TRP-2 derived pote Peptide fragment och period pote Peptide fragment och period pote Peptide fragment och period pote peptide fragment och protective protection of the period pote peptide fragment och period pote peptide fragment och period protection protecti

El peptide RV-EP26 Biotinylated cross

NYLated cross KHS1-derived

Glutathionylspermi

Human

Human leukocyte an HLA binding peptid HLA binding peptid Hepatitis B virus Antlerin OT-1 N-te Hepatitis B virus-Hepatitis B virus-

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04-JUN-1993;
29-NOV-1993;
                                                                                                                                                                                                                                                                                                                                        R59496-R61666 are immunogenic 10mer peptides that contain a HLA-A2.1 binding motif. These peptides bind HLA-A2.1 and have a binding affinity of at least 1% as compared to a reference peptide (R71293). R61525 has an IC50 of 0.018 and the sequence occurs at position 773 in the human c-ERB2 gene product. Peptides of the invention can induce cytotoxic T lymphocytes which can react with target cells. They can be used for the treatment or prophlyaxis of cancer, eg.
                                                                                      11-FEB-1997
                                                                                                               R97508;
                                                                                                                                    R97508 standard; peptide;
                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                 prostate
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  autoimmune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Grey HM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-MAR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15-SEP-1994.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MAGE-1; melanoma antigen-1; core antigen; surface antigen; pharmaceutical composition; in vivo; ex vivo; therapeutic; diagnostic; MIC class I molecule; major histocompatability complex;
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          Homo sapiens
                                p53; Ne 2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HLA-A2.1; 9mer; 10mer; anchor; human leukocyte antigen.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Immunogenic peptide(s) having an HLA-A2.1 binding motif - used for treatment or prophylaxis of cancer, virus infection or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 numan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Peptide fragment (1.0738) of c-ERB2 binds HLA-A2.1.
                                                               totoxic T lymphocyte-activating Her-2/Neu-specific peptide
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                                                                                                                                                                                                vmagvgspyv
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93US-0073205.
93US-0159184.
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                            antigenic;
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                            vaccine;
                                        acid; CTL; cytotoxic T lymphocyte;
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Pred. No.
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Mismatches
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                              immunisation;
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                                                                                                                                                                                                                                                                     Length 10;
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (CTLs) which specifically target malignant cells. The peptide corresponds to amino acids 773-782 of human Her-2/Neu protein. CTL-activating peptides can be used in a vaccine for protecting against tumour cell formation. CTLs activated by the peptides will lyse tumour cells displaying specific peptides. Antibodies against CTL-activating peptides are useful for the identification of other similar compounds which may be useful for treating cancer or virally-infected cells, or for diagnosis. The peptide and vaccines produced provide immunity to a high percentage of different ethnic groups, i.e. those with different HLA alleles.
                                                                                                                                                                                        Her-2/neu protein; human leukocyte antigen A2.1; HLA; cytotoxic T lymphocyte; CTL; immune response; tumour-T-cell receptor; TCR; tumour treatment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        In vivo activation of tumour-specific cytotoxic T lymphocytes - by contacting with polypeptide(s) derived from human p53 or Her-2/Neu proteins
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                                (SCRI ) SCRIPPS RES INST
                                                         05-MAR-1996;
                                                                                 05-MAR-1997;
                                                                                                        12-SEP-1997.
                                                                                                                             WO9732603-A1
                                                                                                                                                      Homo
                                                                                                                                                                  Synthetic
                                                                                                                                                                                                                                         Immunogenic
                                                                                                                                                                                                                                                                23-MAR-1998
                                                                                                                                                                                                                                                                                        w36826;
                                                                                                                                                                                                                                                                                                             W36826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 5; Page 124; 158pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (SCRI ) SCRIPPS RES
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                                                                                                                                                     sapiens
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                                                                                                                                                                                                                                                                                                             standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                      10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        is a peptide capable of activating cytotoxic T
                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
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                                                                                                                                                                                                                                       peptide H7 based on the human Her-2/neu protein.
                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; ilarity 100.0%; Conservative 0
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                                                         96US-0012845
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                    UB 17;
No. 0.0014;
Mismatches
                                                                                                                                                                                                    tumour-associated antigen;
                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 10;
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Lustgarten J,

Sherman LA;

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RESULT
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          manner. Cells expressing recombinant TCR are used to identify antigens associated with a tumour and to treat tumours in humans. Transgenic mid are a more convenient source of CTL than the tumour-infiltrating lymphocytes previously used. TCR can be humanised to reduce side-reactions and short peptide derivatives of TCR are more economical to produce than TCR itself, particularly when expressed as a discrete content of the terms of 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          positions 773-782. The ability of these peptides to inhibit the binding of an influenza virus matrix protein peptide M1 to HLA A2.1 was measured by inhibition of lysis by an M1 specific, HLA A2.1 restricted, cytotoxic Tlymphocyte (CTL) clone. The present protein showed 55% inhibition. The peptides were also tested for their ability to elicit an immune response in vivo. However, only H3 (W36824) and H7 (W36826) were able to do this. H3 and H7 peptides are tumour-associated antigens, and were used to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   immunize a transgenic, non-human vertebrate (that has been modified to express at least one HLA antigen), so that the animal produces CTL which displays HLA-restricted T-ceal receptor (TCR) specificity for the antigen. Nucleic acid encoding variable regions of the alpha and beta
Disease specific immunogen
                                                                                                                                                                                                                                                                                                                            06-AUG-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cytotoxic T lymphocyte;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HER-2/neu synthetic peptide epitope
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic
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                                                     WPI; 1998-437388/37
                                                                                                          Engelhard VH,
                                                                                                                                                                                                                    30-JAN-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    tyrosinase cytotoxic lymphocyte response; lymphocyte; cysteine-depleted; melanoma.
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                                                                                                          Hunt DF,
                                                                                                                                                                                                                  97US-0037781
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                                                                                                          Kittlesen D,
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                                                                                                                                                               FOUND
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Pred. No. 0.0014;
); Mismatches 0
comprises disease specific cytotoxic
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Best Local
         Sequences shown in W70053 to W70075 represent peptides derived free HER-2/neu (cerB-2) antigen. The peptides can bind to a human leuk antigen (HLA), HLA-A2.1 and are used to exemplify the method of invention of producing antigen-specific cytotoxic T cells (CTLs) vitro. The method comprises contacting immunogenic peptides from antigen that binds class I major histocompatibility complex (MHC)
                                                                                                                                                         Production of antigen-specific cytotoxic T cells - by incubating immunogenic peptide(s) from antigen that binds class I major histocompatibility complex molecules with pre-treated antigen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        human leukocyte antigen; HLA; tumour associated antigen; cancer; antigen presenting cell; APC; immunogenic peptide; immune disorder; viral infection; MIDS; hepatitis; bacterial infection; malaria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              W70071;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            than the native epitope. The epitopes can be used in a disease-specific immunogen to protect a mammal against disease in particular melanomas. The peptides may also be used to screen a sample for the presence of an antigen with the same epitope, or with a different cross-reactive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The peptide epitope W77119-W77138 were created for human tumour-specific cytotoxic T lymphocyte response. These peptides are are cysteine-depleted mutants of a native disease-specific CTL epitope. The cysteine depleted CTL epitopes elicit a stronger or more specific CTL response depleted CTL epitopes elicit a stronger or more specific CTL response
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                                                                                                                 Example 7; Page 77;
                                                                                                                                                                                                                                                                              (EPIM-) EPIMMUNE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HER-2/neu derived HLA-A2.1 binding peptide 19 (residues 773-782).
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Best Local
The present invention relates to a new pharmaceutical composition comprising a unit dose form of a peptide, or analogue, comprising an epitope selected from those represented by peptides Y98812-Y99339 which are derived from various antigens for various human leucocyte antigen class DR molecules, representative of the world wide population. The peptide/analogue binds to an HLA class II molecule at an IC-50 of less than or equal to 1,000 nM. The pharmaceutical can be used to induce a helper T cell response. The pharmaceutical focuses the immune response towards selected determinants and could therefore be used in cases of chronic viral diseases and cancer. Examples of diseases that can be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     pretreatment growth factors, and incubating the APCs with purified CD8 cells in the presence of at least 2 incubation growth factors, thereby producing antigen-specific CTLs. A method for specifically killing target cells in a human patient is also provided which comprises obtaining a fluid sample containing CTLs from a patient, contacting the cytotoxic T cells with APCs pretreated with pre-treatment growth factors, where the APCs comprise class I MHC molecules. The pretreated APCs are incubated with the cytotoxic growth factors, thereby producing activated CTLs which are contacted with a carrier to form a composition. The composition can then be administered to the patient. The activated CTLs can be used for treating cancers, immune disorders, viral infections, ALDS, hepatitis, bacterial infection, fungal infection, malaria or interesting cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human leucocyte antigen; HLA class II; antigen epitope; pharmaceutical; immune response; chronic viral disease; cancer; autolimmune disease; rhoumatoid arthritis; multiple sclerosis; myasthenia gravis; AIDS; allograft rejection; allergy; lyme disease; hepatitis; prostate cancer; glomerulonephritis; food hypersensitivity; malaria.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HLA class II binding antigen epitope peptide #50
                                                                                                                                                                                                                                                                                                                                                              Claim
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                                                                                                                                                                                                                                                                                                                                                                                                                  compositions containing immunogenic peptide epitopes for various class II DR molecules useful for inducing helper {\tt T} cell response
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Pred. No. 0.0014;
Mismatches 0;
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Y45390 to Y48214 represent specifically claimed having a human major histocompatibility complex known as human leukocyte antigen (HLA)) binding peptides can bind to a specific HLA allele (i.e.

immunogenic peptides (MHC) Class I (also motif. The immunogen **HLA-A** subtypes

immunogenic

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10; Conser
                                                                                                                                                                                             EPIMMUNE INC
                                                                                                                                                                                                                                                                                                                                                                              immunisation.
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Best Local S
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peptides of
HLA-A2.1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human leukocyte antigen; binding; immunogenic; glycoprotein; MHC; immune response; T cell activation; major histocompatibility comp cytotoxic T lymphocyte; CTL; tumour rejection; viral infection; prostate cancer; hepatitis B; hepatitis C; AIDS; renal carcinoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               produce CTLs ex vivo for infusion back into a patient. The polynucleotides encoding the immunogenic peptides are also useful therapeutically and for immunisation as above.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 13-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Y46413 standard;
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                                                                                         ¥45390 to
                                                                                                                                            Claim
                                                                                                                                                                                                                                                            WPI; 1999-551214/46
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           vaccine;
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                                                                                                                                                                                     immunogenic peptides with HLA binding motif, diagnosis of cancers and viral diseases
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9; Conser
                     o Y48214 represent specifically claimed in human major histocompatibility complex human leukocyte antigen (HLA) binding man bind to a specific HLA allele (i.e.
                                                                                                                                          Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             immunisation
                                                                                                                                                                                                                                                                                                       Kubo
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100.0%; Pred. No.
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                                                                                                                                                                                                                                                                                                       Grey HM,
  induce
                     immunogenic peptides (MHC) Class I (also motif. The immunogenic HLA-A subtypes
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                                                                                                                                                                                                              useful
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cytotoxic T cell
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Best Local S
Matches 9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               They can be administered as vaccines to elicit an immune response in individuals susceptible or otherwise at risk of viral infection or cancer, or used to treat chronic or acute conditions. They are also useful diagnostically, and can be used to induce a cytotoxic T cell response, by contacting a cytotoxic T cell with the peptide e.g. to produce CTLs ex vivo for infusion back into a patient. The polynucleotides encoding the immunogenic peptides are also useful
Y45390 to Y48214 represent specifically claimed immunogenic peptides having a human major histocompatibility complex (MHC) Class I (also known as human leukocyte antigen (HLA) binding motif. The immunogenic peptides can bind to a specific HLA allele (i.e. HLA-A subtypes HLA-A2.1, A1, A3.2 or A24.1 or HLA-B or C) and induce a cytotoxic T cell response against the antigen from which the peptide is derived.
                                                                                                                                                                                                                                                                                                                       13-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                      16-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               immune response; T cell activation; major histocompatibility complex; cytotoxic T lymphocyte; CTL; tumour rejection; viral infection; cance prostate cancer; hepatitis B; hepatitis C; AIDS; renal carcinoma;
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                                                                                                             Claim 1;
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                                                                                                                                                                                                                                                                                       13-MAR-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human leukocyte antigen; binding; immunogenic; glycoprotein; MHC; HLA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  therapeutically and for immunisation as above.
                                                                                                                                                                                                                                                        (EPIM-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  vaccine;
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nes 9; Conserv
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                                                                                                                                           immunogenic peptides diagnosis of cancers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           standard; Peptide; 9
                                                                                                                                                                                                                                                          EPIMMUNE INC
                                                                                                             Page 74;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    immunisation.
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                                                                                                             150pp;
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100.0%;
                                                                                                             English
                                                                                                                                           with HLA binding motif, and viral diseases
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2.1e+05;
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Best Local
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peptides having an HLA-A3.2, HLA-A1, HLA-A11 or HLA-A24.1 binding motif. For example, the peptides having an HLA-A3.2 binding motif. For example, the peptides having an HLA-A3.2 binding motif each have 9-10 residues and contain, from the N-terminus to the C-terminus, (a) a first conserved residue selected from L, M, I, V, S, A, T, F, C, G, D and E and (b) a second conserved residue of K, R, Y, H or F, where the first and second conserved residue of separated by 6-7 residues. The peptides are
                                                                                                                                                                                                                                                                                                                                                                                Disclosure;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Peptide which specifically binds selected MHC allele - used to induce an immune response for treatment or prevention of viral
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07-AUG-1992;
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wHC; major histocompatability complex; viral infection;
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                                                                                                                                                                                                                                                                                                                                                                        Page 103; 150pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   oncogene-derived HLA-binding peptide
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92US-0926666
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100.0%; Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
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2.1e+05;
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2 (45390 to y48214 represent specifically claimed immunogenic peptides CC having a human major histocompatibility complex (MHC) Class I (also CC known as human leukocyte antigen (HLA) binding motif. The immunogenic CC peptides can bind to a specific HLA allele (i.e. HLA-A subtypes CC HLA-A2.1, A1, A3.2 or A24.1 or HLA-B or C) and induce a cytotoxic T cell Cresponse against the antigen from which the peptide is derived. CC Cytotoxic T lymphocytes (CTLS) which destroy antigen-bearing cells are CC normally induced by an antigen in the form of a peptide fragment bound CC to a HLA molecule, rather than the intact foreign antigen itself, and CC are particularly important in tumour rejection and in fighting viral CC infections. The peptides are therefore useful therapeutically to treat CC or prevent viral infections and cancers in mammals (especially humans) CC e.g. prostate cancer, hepatitis B and C, AIDS, and renal carcinoma. CC They can be administered as vaccines to elicit an immune response in CC cancer, or used to treat chronic or acute conditions. They are also cancer, or used to treat chronic or acute conditions. They are also cancer, or used to treat chronic or acute conditions.
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and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human leukocyte antigen; binding; immunogenic; glycoprotein; MHC; immune response; T cell activation; major histocompatibility compcytotoxic T lymphocyte; CTL; tumour rejection; viral infection; c; prostate cancer; hepatitis B; hepatitis C; AIDS; renal carcinoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     selected MHC molecules and inducing an immune response. They can be used to treat and/or prevent viral infection and cancer, e.g. prostate cancer, lymphoma, hepatitits or AIDS. They can also be used to produce antibodies for use as diagnostic or therapeutic agents. The peptides can also be used as diagnostic agents.
                                                                                                                                                                                                                                                                                                      Claim 1; Page 33; 150pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1999-551214/46
                                                                                                                                                                                                                                                                                                                                                                                                                                  Sette A,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Immunogenic peptide having a human leukocyte antigen binding
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                                                                                                                                                                                                                                                                                                                                          immunogenic peptides with HLA binding motif, useful in treatment diagnosis of cancers and viral diseases -
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100.0%; Pred. No
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                                                                               towards selected determinants and could therefore be used in cases of chronic viral diseases and cancer. Examples of diseases that can be treated using the peptide containing pharmaceutical include autoimmune diseases (rheumatoid arthritis, multiple sclerosis, and myasthenia gravis), allograft rejection, allergies, lyme disease, hepatitis, post-streptococcal endocarditis or glomerulonephritis and food
                                                                                                                                                                                      class DR molecules, representative of the world wide population. The peptide/analogue binds to an HLA class II molecule at an IC-50 of less than or equal to 1,000 nM. The pharmaceutical can be used to induce a helper T cell response. The pharmaceutical focuses the immune response
              hypersensitivities. The peptide epitopes can be used to enhance immune responses against other immunogens administered with the peptides. Diseases which can be treated using immunogenic mixtures include prostate cancer, hepatitis B, hepatitis C, AIDS, renal carcinoma, cervical
                                                                                                                                                                                                                                                        The present invention relates to a new pharmaceutical composition comprising a unit dose form of a peptide, or analogue, comprising an epitope selected from those represented by peptides y98812-y9939 which are derived from various antigens for various human leucocyte antigen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  glomerulonephritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            response, by contacting a cytotoxic T cell with the peptide e.g. produce CTLs ex vivo for infusion back into a patient. The polynucleotides encoding the immunogenic peptides are also useful therapeutically and for immunisation as above.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human leucocyte antigen; HLA class II; antigen epitope; pharmaceutical; immune response; chronic viral disease; cancer; autoimmune disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Y98860 standard; Peptide; 15
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                                                                                                                                                                                                                                                                                                                                                                                 compositions containing immunogenic peptide epitopes for various class II DR molecules useful for inducing helper {\tt T} cell response
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ponse; chronic viral disease; cancer; autorimune disease; arthritis; multiple sclerosis; myasthenia gravis; AIDS; rejection; allergy; lyme disease; hepatitis; prostate canephritis; food hypersensitivity; malaria.
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Lymphoma,
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 condyloma acuminatum.
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Pred. No.
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0.0079;
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(TRP-2). This region contains the peptide epitope of TRP-2 that is able to stimulate cytokine release by CTL cells. Apart from W30829-30 (these contain extra residues at the N-terminal (W30829) the C-terminal (W30830)), the peptides were modified to contain substitutions at the anchor residues.
                                                                                                                                                Cancer antigen peptide(s) derived from the tyrosinase-related protein 1 or 2 - useful for detecting, preventing or treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tyrosinase related protein 2 gene; TRP-1; gp75; tumour antigen; tumour infiltrating lymphocyte; TIL; TIL586; cancer peptide; TRP-2 alternative reading frame; cancer detection; pre-cancer detection;
                                                                                                         Claim 17;
                                                                                                                                                                                        WPI; 1997-415349/38
                                                                                                                                                                                                                Rosenberg
                                                                                                                                                                                                                                                                      04-OCT-1996;
09-FEB-1996;
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                                                                Peptides W30829-38 and W37011-21 are modified versions of derived from positions 197-205 of the tyrosinase related |
                                                                                                                                                                                                                                          (USSH ) US DEPT HEALTH & HUMAN SERVICES
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                                                                                                                                                                                                                 SA,
                                                                                                                                  a mammal,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      potential cancer antigen
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96US-0599602.
                                                                                                        56; 111pp; English.
                                                                                                                                                                                                                                                                                                            97WO-US02186
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                                                                                                                                                                                                                                                                                                                                                                                           /note= "wild type Leu198 substituted with
                                                                                                                                                                                                                                                                                                                                                                                                         /label= L2A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Peptide; 9
                                                                                                                                  especially melanoma
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100.0%;
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                                                                                                                                                or treating
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                                                                a peptide
protein 2
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at the anchor residues. Of all these peptides,

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are derived from various antigens for various human leucocyte antigen class DR molecules, representative of the world wide population. The peptide/analogue binds to an HLA class II molecule at an IC-50 of less than or equal to 1,000 nM. The pharmaceutical can be used to induce a helper T cell response. The pharmaceutical focuses the immune response towards selected determinants and could therefore be used in cases of chronic viral diseases and cancer. Examples of diseases that can be treated using the peptide containing pharmaceutical include autoimmune diseases (rheumatoid arthritis, multiple sclerosis, and myasthenia gravis), allograft rejection, allergies, lyme disease, hepatitis, post-streptococcal endocarditis or glomerulonephritis and food
                                                                                                                                                                                                      The present invention relates to a new pharmaceutical composition comprising a unit dose form of a peptide, or analogue, comprising epitope selected from those represented by peptides Y98812-Y99339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human leucocyte antigen; HLA class II; antigen epitope; pharmaceutical; immune response; chronic viral disease; cancer; autoimmune disease; rheumatoid arthritis; multiple sclerosis; myasthenia gravis; AIDS; allograft rejection; allergy; lyme disease; hepatitis; prostate cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                W30829-38 were able to stimulate cytokine release. Other antigenic peptides have also been identified from TRP-1. The nucleic acids encoding the cancer peptides or TRP-2 can be used to detect a cancer or pre-cancer in a mammal, especially by detecting the presence of the alterative ORF 3 of the TRP-1 gene or the sequence encoding the novel tumour antigen TRP-2. Vectors and recombinant viruses containing antigen peptide encoding nucleic acids, antibodies raised against the peptides, or the peptides themselves can be used to prevent or treat a cancer in a mammal,
                                                                                                                                                                                                                                                                                    Claim 1;
                                                                                                                                                                                                                                                                                                                                                                             WPI; 2000-097143/08.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-MAY-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unidentified
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   (EPIM-) EPIMMUNE INC
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                                                                                                                                                                                                                                                                                                                    compositions containing immunogenic peptide epitopes for various class II DR molecules useful for inducing helper T cell response
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MAGVGSPY 9
                                                                                                                                                                                                                                                                                  Page 42; 60pp;
                                                                                                                                                                                                                                                                                                                                                                                                               Southwood S,
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Pred. No. 2.1e+05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             epitope peptide #146
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Best Local :
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                                                                                                                         Cancer antigen peptide(s) derived from the tyrosinase-related protein 1 or 2 - useful for detecting, preventing or treating cancer in a mammal, especially melanoma
                                                                           Claim 17; Page 56; lllpp; English
                                                                                                                                                                                                                                                                                                                                                                                                   04-OCT-1996;
09-FEB-1996;
                                                                                                                                                                                                                                        WPI; 1997-415349/38
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TRP-2 derived potential cancer antigen 6,
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| 10 vmagvg
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96US-0599602.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /label= L2S
/note= "wild type Leu198
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 29;
Pred. No.
                                                                                                                                                                                                                                                                                                                                               SERVICES
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pre-cancer dete
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                                                                                                                                                          or treating
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Peptides W30829-38 and W37011-21 are modified versions of a peptide derived from positions 197-205 of the tyrosinase related protein 2

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RESULT
W37019
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Matches 4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tyrosinase related protein 2 gene; TRP-1; gp75; tumour antigen; tumour infiltrating lymphocyte; TIL; TIL586; cancer peptide; TR alternative reading frame; cancer detection; pre-cancer detecti
                                        Cancer antigen peptide(s) derived from the tyrosinase-related protein 1 or 2 - useful for detecting, preventing or treatin cancer in a mammal, especially melanoma
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Example 14; Page 56; 111pp; English.
                                                                                                                            WPI; 1997-415349/38
                                                                                                                                                                    Rosenberg SA,
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1 lsgpgrpy 8
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                                                                                                                                                                                                               HEALTH & HUMAN SERVICES
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/note= "wild type Arg202 substituted with Ala"
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Pred. No.
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Peptides W30829-38 and W37011-21 are modified versions of a peptide derived from positions 197-205 of the tyrosinase related protein 2

Peptides W38103-05 are peptide recognition units that are based on sequences of the YAP WM domain binding proteins WBP-1 and WBP-2. The were used to screen human bone marrow and brain cDNA libraries. The cDNA clones were identified and isolated. These clones represented novel human genes WWP1 (W36794), WWP2 (W36795) and WWP3 (W36796).

and WWP3 (W36796). The

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RESULT
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                W38105;
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                                                                                               Identifying cell signalling and growth regulatory polypeptides by reaction with multivalent recognition complex - polypeptides are useful in targetted drug selection
                                                                                                                                                                                                                                             03-APR-1996;
                                                                                                                                                                                                                                                                      03-APR-1997;
                                                                                                                                                                                                                                                                                                                                                             Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                        Peptide recognition unit; YAP WW domain binding protein; WBP-1; WDP-1; cell signalling; growth regulation; cytoskeleton orga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Peptide recognition unit WBP-2B used to identify
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-APR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                        Example 1;
                                                                                                                                                                            Fowlkes DM,
                                                                                                                                                                                                    (CYTO-) CYTOGEN CORP
(UYNC-) UNIV NORTH CA
                                                                                                                                                                                                                                                                                               09-OCT-1997
                                                                                                                                                                                                                                                                                                                        WO9737223-A1
                                                                                                                                                                                                                                                                                                                                                                                                                            targeted drug
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                                                                                                                                                    1997-503234/46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
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                                                                                                                                                                                                       NORTH CAROLINA
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                                                                                                                                                                                                                                                                                                                                                                                                                            screening;
                                                                                                                                                                                                                                           96US-0630916
                                                                                                                                                                                                                                                                      97WO-US05547
                                                                         70;
                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                 /note= "residue is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         peptide; 16
                                                                      220pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     51.0%;
50.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                            ng; growth regulation; cytoskeleto modulator; www domain interaction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2
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Pred.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26;
No.
                                                                                                                                                                                                                                                                                                                                                biotinylated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 18;
2.1e+05;
                                                                                                                                                                                                                                                                                                                                                                                                                                       cytoskeleton organisation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 9;
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RESULT
Y07541
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   wW domain is a small functional domain found in a large number of proteins from a variety of species including humans, nematodes and yeast. Its name is derived from the observation that two tryptophan residues, one in the amino terminal portion of the WW domain and one in the carboxyl terminal portion, are conserved. Most proteins containing WW domains have a function involving cell signalling and growth regulation or the organisation of the cytoskeleton. Polypeptides containing a WW domain are identified by treating a multivalent recognition unit complex that has selective binding affinity for a WW domain, with many polypeptides and identifying those with selective affinity for the complex. Proteins containing WW domains are used for targeted drug afmain.
                                    New hexapeptide derivs. having antiarrhythmic activity - useful preventing ischaemia- or age-related rhythm disorders without significant pro-arrhythmic activity
           Claim
                                                                                               WPI; 1996-342238/34.
                                                                                                                                                                                                              04-JAN-1996;
                                                                                                                                                                                                                                        18-JUL-1996
                                                                                                                                                                                                                                                                                                                                                                               Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Antiarrhythmic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hexapeptide having antiarrhythmic activity.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Y07541;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Y07541 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       screening, i.e. to identify potential modulators of specific WW domain interactions. The valency of the recognition unit is important in determining specificity of interaction with WW domains. In multivalent form specificity is relaxed, but not lost, so proteins containing WW domains similar, but not identical, to the sequence of the peptides' target WW can be detected, including new polypeptides.
                                                                                                                                                      (BADI ) BASF AG
                                                                                                                                                                                  14-JAN-1995;
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           Page 7; 13pp; German
                                                                                                                         Tudyka T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16
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                                                                                                                                                                                  95DE-1000990
                                                                                                                                                                                                            96WO-EP00009
                                                                                                                                                                                                                                                                                                          /note= "3-iodo-tyrosinamide (Claim 2); also
3-fluoro-, 3 -chloro- or 3-bromo-tyrosinam
                                                                                                                                                                                                                                                                                                                                                 /label= 4Hyp
/note= "4-hydroxyproline residue"
                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                peptide;
                                                                                                                                                                                                                                                                                             Examples (Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         51.0%;
57.1%;
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Pred. No.
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                                                                                                                                                                                                                                                                                                          or 3-bromo-tyrosinamide
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RESULT
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Best Local S
Matches 4
                    The present sequence represents the new cyclic peptides cyclo(CF3C(OH)-Gly-Ala-Gly-4-Hyp-Pro-Tyr-CONH) and cyclo(CO-Gly-Ala-Gly-4-Hyp-Pro-Tyr-CONH), which are useful as antiarrhythmic agents. They have better stability in solution than the known corresponding linear antiarrhythmic peptide AAP10, i.e. NH2-Gly-Ala-Gly-4-Hyp-Pro-Tyr-CONH2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The patent discloses new hexapeptide compounds having antiarrhythmic activity which are useful for preventing ischaemia- or age-related rhythm discorders without significant pro-arrhythmic activity. They suppress local differences in the duration of action potential and irregularities in the spread of the exciting stimulus. The peptides have the generic formula H2N-X-Ala-Gly-Hyp-Y-Z-NH2 (see Y07540) in which X is Ala Arg, Gly or Val, Y is Pro or His, and Z is Tyr or Phe which is optionally ring-substituted by I, F, Cl or Br. The present sequence represents a preferred example of the new peptides.
                                                                                                                   Claims 1,
                                                                                                                                           New cyclic peptides used as antiarrhythmic agents -
than linear antiarrhythmic peptides
                                                                                                                                                                                   WPI; 1998-468293/41
                                                                                                                                                                                                            Dhein S,
                                                                                                                                                                                                                                                                           27-FEB-1997;
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                                                                                                                                                                                                                                                                                                                                                                                               Modified-site
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               W11180;
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                                                                                                                                                                                                                                      GROVER R.
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                                                                                                                                                                                                            Grover R;
                                                                                                                 3; Page 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                            97DE-1007854
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cyclic; AAP10
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                 /label= 4Hyp
                                                                                                                                                                                                                                                                                                                                                                                                       /note= "Gly(1) and Tyr(6) are condensed via the
linkage (Tyr6)-CONH-C(CF3)(OH)-(Gly1) or
    (Tyr6)-CONH-CO-(Gly1), thus forming a cyclic peptide"
                                                                                                                 4 pp;
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                                                                                                                   German.
                                                                                                                                          peptides
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Pred. No. 2.
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2.1e+05;
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RESULT
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Best Local
                                                                                                                                                                                                R95511-R95520 are antigen binding peptides ("abtides"), which bind to a human prostate carcinoma cell antigen. The abtides are identified from random peptide libraries using specific ligand binding. Abtides mimic the binding specificity of large molecules such as antibodies and receptors but have a much smaller size allowing their production at a lower cost and reducing the extent of their immunogenicity aiding in vivo delivery. The abtides are useful for the diagnosis, detection, imaging and treatment of disease, e.g. tumours, prostate cancer.
                                                                                                                                                                                                                                                                                                                        New isolated peptide(s) with specific binding activities - screening random peptide libraries, for use in diagnostic therapeutic compsns.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Abtide; prostate specific mucin antigen; human prostate cancer; LNCaP; diagnostic; detection; imaging; tumour; phage; peptide library;
                     Y59138 standard; peptide; 8
                                                                                                                                                                                                                                                                                                                                                                      WPI; 1996-188471/19
                                                                                                                                                                                                                                                                                                                                                                                                                                       07-JUN-1995;
21-SEP-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28-MAR-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human prostate carcinoma cell antigen binding peptide ("abtide").
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          R95514 standard; peptide; 8 AA
                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                     Claim
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              polymorphic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               06-NOV-1996
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                                                                            gvstpy 8
                                                                                                                                                                                                                                                                                                   48; Page 93; 106pp;
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4; Conserv
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4; Conser
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94US-0310192.
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66.7%;
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                                                                                                                       Score 25; DB Pred. No. 2.1e 1; Mismatches
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Pred. No.
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                                                                                                                                 DB 17;
2.1e+05;
                                                                                                                                          Length 8;
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RESULT
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                                                                                                                                                                                                                                                                                                                                                                                                            PAK4, a novel serine/threonine kinase or its mutant homolog. PAK4 is an ceifector for the GTPases Rac and Cdc42Hs which are involved in intracellular signal cascades, morphogenesis and mitogenesis, and activate the JNK and p38 MAP kinase pathways. Inhibiting interaction of PAK4 with these enzymes will thus result in inhibition of actin polymerization and formation of filopodia. The PAK4 nucleic acid used for recombinant production of the protein, and as a source of probes for inhibiting homologous sequences and of (anti)sense oligonucleotides for inhibiting pAK4 expression. The protein, or its fragments, are used to raise specific antibodies and these are useful as ligands for therapeutic inhibition of interaction between PAK4 and its native binding partners. Inhibition of PAK4 activity or expression is used for treatment of cancer and arthritis. The present sequence represents a conserved kinase domain fragment of human PAK65 and yeast STE20. This is used to design
                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 4; Conserv
         Tyrosinase related protein 2 gene; TRP-1; gp75; tumour antigen; tumour infiltrating lymphocyte; TIL; TIL586; cancer peptide; TRP-2; alternative reading frame; cancer detection; pre-cancer detection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAK4; serine/threonine kinase; GTPase; intracellular signal cascade; Rac; Cdc42H; morphogenesis; mitogenesis; JNK; p38 MAP kinase; human; actin polymerization; filopodia; cancer; arthritis; PAK65; STE20.
                                                                                                                                                            W30838 standard; Peptide; 9 AA
                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                    degenerate primers for isolation of human PAK4.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08-MAR-2000
                                                                                                   20-MAR-1998
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| vgtpy
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                                                                                                                                                                                                                                                                 5 VGSPY 9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      mammalian nucleic acid useful for treating cancer and
                                                                      derived
                                                                                                                                                                                                                                     ഗ
                                                                                                                                                                                                                                                                                                                                                                        8 AA;
                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cerevisiae
                                                                    potential cancer antigen
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80
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Pred. No.
1; Mismatc
                                                                                                                                                                                                                                                                                                Mismatches
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                                                                                                                                                                                                                                                                                                              .1e+05;
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                                                                                                                                                                                                                                                                                                                           Length
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                                                                    positions 197-205
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Query Match

Best Local Similarity

"""hes 4; Conserv
RESULT
W30832
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                 Tyrosinase related protein 2 gene; TRP-1; gp75; tumour antigen; tumour infiltrating lymphocyte; TIL; TIL586; cancer peptide; TRP-2 alternative reading frame; cancer detection; pre-cancer detection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         the C-terminal (W30830)), the peptides were modified to contain substitutions at the anchor residues. Of all these peptides, only W30829-38 were able to stimulate cytokine release. Other antigenic peptides have also been identified from TRP-1. The nucleic acids encoding the cancer peptides or TRP-2 can be used to detect a cancer or pre-cancer the cancer peptides or TRP-2 can be used to detect a cancer or pre-cancer a mammal, especially by detecting the presence of the alterative ORF 3
melanoma
                                                                                                                                  TRP-2 derived potential cancer antigen 5,
                                                                                                                                                                                            20-MAR-1998
                                                                                                                                                                                                                                                                                                          W30832 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        of the TRP-1 gene or the sequence encoding the novel tumour antigen TRP-2. Vectors and recombinant viruses containing antigen peptide encoding nucleic acids, antibodies raised against the peptides, or 1 peptides themselves can be used to prevent or treat a cancer in a management of the sequence of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           derived from positions 197-205 of the tyrosinase related protein 2 (TRP-2). This region contains the peptide epitope of TRP-2 that is able to stimulate cytokine release by CTL cells. Apart from W30829-30 (these contain extra residues at the N-terminal (W30829) and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cancer antigen peptide(s) derived from the tyrosinase-related protein 1 or 2 - useful for detecting, preventing or treating a cancer in a mammal, especially melanoma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Peptides W30829-38 and W37011-21 are modified versions of a peptide derived from positions 197-205 of the tyrosinase related protein 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 17; Page 56; 111pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rosenberg SA,
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09-FEB-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-FEB-1997;
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                                                                                                                                                                                                                                                                                                                                                                 23
                                                                                                                                                                                                                                                                                                                                                                                                                                         1 llgpgkpy 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 MAGVGSPY 9 : | | | | |
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       96US-0725736.
96US-0599602.
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                                                                                                                                                                                                                                                                                                          Peptide; 9 AA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    49.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 25; DB 18; I
Pred. No. 2.1e+05;
1; Mismatches 3;
                                                                                                                                     based
                                                                                                                                  on.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 9;
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                                                                                                                                     positions 197-205
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                                                    TRP-2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   in a mammal,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             or the
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OS XXX DT XXX
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                                                                                                                                                                                                                                                                                      Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                              the C-terminal (MJ0830)), the peptides were modified to contain substitutions at the anchor residues. Of all these peptides, only w30829-38 were able to stimulate cytokine release. Other antigenic peptides have also been identified from TRP-1. The nucleic acids encoding the cancer peptides or TRP-2 can be used to detect a cancer or pre-cancer in a mammal, especially by detecting the presence of the alterative ORF 3 of the TRP-1 gene or the sequence encoding the novel tumour antigen TRP-2. Vectors and recombinant viruses containing antigen peptide encoding nucleic acids, antibodies raised against the peptides, or the peptides themselves can be used to prevent or treat a cancer in a mammal,
                         Low molecular Rabphilin-3A;
                                                                Rabphilin-3A fragment, peak
                                                                                              14-MAR-1995
                                                                                                                                                   R57426 standard;
                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                       especially a melanoma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        W30829-30 (these contain extra residues at the N-terminal (W30829)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Peptides W30829-38 and W37011-21 are modified versions of a peptide derived from positions 197-205 of the tyrosinase related protein 2 (TRP-2). This region contains the peptide epitope of TRP-2 that is able to stimulate cytokine release by CTL cells. Apart from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 17; Page 56; lllpp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cancer in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cancer antigen peptide(s) derived from the tyrosinase-related protein 1\ \mathrm{or}\ 2 - useful for detecting, preventing or treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rosenberg SA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          04-OCT-1996;
09-FEB-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1997-415349/38
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO9729195-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14-AUG-1997.
                                                                                                                                                                             24
                                                                                                                                                                                                                     1 lvgpgrpy
                                                                                                                                                                                                                                                2 MAGVGSPY 9
                                                                                                                                                                                                                                                                           4.
                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a mammal, especially melanoma
                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                              AA,
                                                                                            (first
                         weight; G protein; target protein;
brain; nerve transmitter.
                                                                                                                                                                                                                      8
                        brain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Wang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          96US-0725736.
96US-0599602.
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                                                                                                                                                   Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note= "wild type Leu198 substituted with Val"
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                                                                                                                                                                                                                                                                                        49.0%;
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                                                                   <u>ب</u>
                                                                                                                                                                                                                                                                                      Score 25; I
Pred. No. 2
                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                      DB 18;
2.1e+05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               preventing
                                                                                                                                                                                                                                                                                                     Length 9;
                                                                                                                                                                                                                                                                          Indels
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RESULT
W62130
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The sequences given in R57422-32 represents fragments of low molecular weight G protein target protein, designated rab3A p25. Rabphilin-3A (Rab3A) is distributed specifically in brain tissue and participates in the release of nerve transmitter substance and is useful in the study
        Example 5;
                         Identifying ligands which mediate biological activity of a protein by identifying target-binding ligands and screening a library for ligands which inhibit target-binding ligand mediated activity
                                                                    WPI; 1998-272389/24.
                                                                                                                                                                                                                         Synthetic
                                                                                                                                                                                                                                           Identification;
drug screening;
                                                                                                                                                                                                                                                                                               16-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    substance
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Target protein of a low molecular found in the brain and involved
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1994-252836/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24-DEC-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-JUL-1994
                                                                                                            (NOVA-) NOVALON PHARM CORP
                                                                                                                                                    31-OCT-1997;
                                                                                                                                                                        07-MAY-1998
                                                                                                                                                                                           WO9819162-A1
                                                                                                                                                                                                              Haemophilus influenzae
                                                                                                                                                                                                                                                                        Haemophilus influenzae tyrosine tRNA synthetase binding peptide
                                                                                                                                                                                                                                                                                                                   W62130
                                                                                                                                                                                                                                                                                                                                      W62130 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     of its secretion.
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                                                                                       DM,
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                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
        Page 100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Page 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12 AA;
                                                                                      Frelinger JA,
                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                               96US-0740671
                                                                                                                                                    97WO-US19638
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       92JP-0344055
                                                                                                                                                                                                                                           ligand; biological activity; target-binding;
library; inhibitory ligand.
                                                                                                                                                                                                                                                                                                                                     peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                        49.0%;
57.1%;
        143pp; English
                                                                                                                                                                                                                                                                                                                                       12
                                                                                      Hyde-Deruyscher
                                                                                                                                                                                                                                                                                                                                                                                                                             Score 25; DB 15; Pred. No. 1.1e+02; Score 2;
                                                                                                                                                                                                                                                                                                                                       A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             G protein rabphilin-3A (RAB3A) in release of nerve transmitter
                                                                                       RP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 12;
                                                                                       кау
                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                       BK;
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RESULT
W15779
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local S
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                                                                                                                                                                                                                                                                                       18-JUN-1996;
10-OCT-1995;
31-JAN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Signal transduction; cell signalling; modulator; immunomodulator; protein kinase C; receptor for activated kinase C; RACK; PKC-beta; cognate; graft rejection; autoimmune disease; allergy; asthma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    W15779;
                                                                                                                                                                                   Kauvar LM,
Vasquez NJ,
                                                                                                                                                                                                                                                                                                                                                                           10-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                    17-APR-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Protein kinase C-beta peptide beta C2-2 (186-198).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9714038-AJ
                                                        Identifying a modulator of intracellular signal transduction - l
determining the interaction of a signal generating peptide with
test substance, allows modulation of the immune system
                                                                                                                                          WPI; 1997-236030/21
                                                                                                                                                                                                                                                (TERR-) TERRAPIN TECHNOLOGIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           standard; Peptide; 13
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                                                                                                                                                                                   Mochly-Rosen Voronova A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                diverse targets
                                                                                                                                                                                                                                                                                       96US-0665647.
95US-0541964.
96US-0594447.
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80.0%;
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Pred.
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                                                                                                                                                                                                                                                  INC.
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Claim

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Page 26;

74pp; English

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RESULT
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Best Local
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to T-cells expressing receptors containing the peptide sequences, whis include antigen-specific immunological tolerance to rheumatoid arthritis can be used for the treatment and prevention of rheumatoid arthritis. The invention can be used for the diagnosis, treatment and prevention of rheumatoid arthritis. Sequences Y66771-958 represent peptides from
                                                                         The invention relates to peptide sequences present in the synovial flu and membranes of rheumatoid arthritis patients, arising from the CDR region of oligocional pathogenic T-cell antigen receptor Vbeta chains. Compositions which contain autoantigenic peptides binding specifically
                                                                                                                                                                                       	extbf{T-cell} antigen receptor 	extbf{V-beta} chain CDR3 region sequences accumulated in synovial membranes of rheumatoid arthritis patients -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C-beta (PKC-beta). It is capable of interrupting the interaction of PKC-beta with its cognate receptor for activated kinase C (RACKI). Beta C2-2 can be used as a signal generating peptide in claimed method for identifying modulators of intracellular signal condition. This method assesses the ability of candidate
                                                                                                                                                                                                                                                                                       Nishioka K,
                                                                                                                                                                                                                                                                                                                                                        29-MAY-1998;
14-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  T cell
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   modulators to affect the interaction between a signal-generating protein, such as a PKC isozyme peptide (see also W1578, W15781, W15781-8), and a cognate binding protein involved in modulating the signal transduction function. Identified substances are useful as immunomodulators (claimed). They act to reduce T-cell activity, reduce the rate of graft rejection, reduce the severity of an autoimmune disorder, ameliorate allergy and/or asthma, or
                                                                                                                                                          Example
                                                                                                                                                                                                                                                                                                                        (TORI .) TORII PHARM CO LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO9963084-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rheumatoid arthritis; arthrosis deformans; T-cell antigen receptor;
                                                                                                                                                                                                                                                                                                                                                                                                     28-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                     09-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ¥66838 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This sequence is a pept
to amino acid residues
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                                                                                                                                                          Page 59; 136pp; Japanese.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cytokine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  autoantigen; immunological tolerance
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98JP-0328761.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            peptide; 13
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dues 186-198
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57.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               designated beta C2-2, that corresponds 198 in the C2 region of protein kinase
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 25; DB 18;
Pred. No. 1.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               chain peptide.
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                                            to rheumatoid arthritis
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Best Local S
Matches 5
                                              w85284-451 represent helper T-cell class II peptides, which can bind to the human leucocyte antigens (HLA) DR4w4, DR1 and DR7. The peptides are used in the course of the invention. The specification describes peptides that that induce a cytotoxic T lymphocyte (CTL) response, and T-helper peptides, that are used together to generate a CTL response for the treatment or prevention of viral, fungal, bacterial or parasitic infections (e.g. hepatitis, acquired immune deficiency syndrome or malaria) or cancer (e.g. renal or cervical carcinoma, lymphoma, prostat cancer or condyloma acuminatum). Helper T-cell peptides may be used alone to induce a helper T cell response, e.g. in cases of autoimmune disease, allograft rejection, allergy, Lyme disease, hepatitis,
                                                                                                                                                                                                                                                         Composition containing peptide that induces cytotoxic T lymphocyte response, and helper peptide - can bind to human leucocyte antigen alleles, used to treat or prevent cancers, parasitic infections and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 acquired immune deficiency syndrome; malaria; cancer; allograft rejection; allergy; Lyme disease; hepatitis; post-streptococcal endocarditis; glomerulonephritis;
                                      disease, allograft rejection, all
post-streptococcal endocarditis,
                                                                                                                                                                                                                   Disclosure; Page 41;
                                                                                                                                                                                                                                                 autoimmune disease
                                                                                                                                                                                                                                                                                                                    WPI; 1998-427679/36
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                                                                                                                                                                                                                                                                                                                                                                                                    07-FEB-1997;
23-JAN-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Helper T-cell peptide; human leucocyte antigen; HLA; DR4w4; DR1; DR7; cytotoxic T lymphocyte; CTL; hepatitis; autoimmune disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Helper T-cell
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      hypersensitivity.
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97US-0036713
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                                                                                                                                                                                                                                                                                                                                               Southwood
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Pred. No. 1.2e
1; Mismatches
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                                      glomerulonephritis and
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No. 1.2e+02;
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                                                                                                                                                                                                                                                          W85284-451 represent helper T-cell class II peptides, which can bind to the human leucocyte antigens (HLA) DRAW4, DR1 and DR7. The peptides are used in the course of the invention. The specification describes are used in the course of the invention. The specification describes that that induce a cytotoxic T lymphocyte (CTL) response, and peptides that that are used together to generate a CTL response for T-helper peptides, that are used together to generate a CTL response for the treatment or prevention of viral, fungal, bacterial or parasitic the treatment or prevention of viral immune deficiency syndrome or infections (e.g. hepatitis, acquired immune deficiency syndrome or infections or cancer (e.g. renal or cervical carcinoma, lymphoma, prostate malaria) or cancer (e.g. renal or cervical carcinoma, lymphoma be used cancer or condyloma acuminatum). Helper T-cell peptides may be used cancer or induce a helper T cell response, e.g. in cases of autoimmune alone to induce a helper T cell response, e.g. in cases of autoimmune disease, allograft rejection, allergy, Lyme disease, hepatitis, buncarcaritistic tresponse, e.g. in cases of autoimmune disease, allograft rejection, allergy, Lyme disease, hepatitis, humans carcitistic tresponse tres
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Composition containing peptide that induces cytotoxic T lymphocyte response, and helper peptide - can bind to human leucocyte antigen alleles, used to treat or prevent cancers, parasitic infections and
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23-JAN-1997;
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4; Conserv
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                                                                                                                                                                               15
       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           97US-0037432.
97US-0036713.
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                                                49.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 25; DB 19;
pred. No. 1.4e+02;
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           Score 25; DB 19;
pred. No. 1.4e+02;
2; Mismatches 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       s
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                             Length 15;
                                 Indels
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                                         0;
                                         Gaps
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1 VMAGVGSPY 9

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                Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Helper T-cell class II peptide derived from SSP2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           W85361;
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    allograft rejection; allergy; Lyme disease; hepatitis; post-streptococcal endocarditis; glomerulonephritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Helper T-cell peptide; human leucocyte antigen; HLA; DR4w4; DR7; cytotoxic T lymphocyte; CTL; hepatitis; autoimmune dise acquired immune deficiency syndrome; malaria; cancer; acquired immune deficiency syndrome; malaria; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16-FEB-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic. plasmodium falciparum
                                                                                                                          w85284-451 represent helper T-cell class II peptides, which can bind to the human leucocyte antigens (HLA) DR4w4, DR1 and DR7. The peptides are used in the course of the invention. The specification describes are used in the course of the invention. The specification describes are used in the course of the invention. The specification describes that that induce a cytotoxic T lymphocyte (CTL) response, and peptides, that are used together to generate a CTL response for T-helper peptides, that are used together to generate a CTL response for infections (e.g. hepatitis, acquired immune deficiency syndrome or infections (e.g. hepatitis, acquired immune deficiency syndrome or infections (e.g. renal or cervical carcinoma, lymphoma, prostate malaria) or cancer (e.g. renal or cervical carcinoma, lymphoma, prostate cancer or condyloma acuminatum). Helper T-cell peptides may be used cancer or induce a helper T cell response, e.g. in cases of autoimmune alone to induce a helper T cell response, e.g. in cases of autoimmune disease, allograft rejection, allergy, Lyme disease, hepatitis, horse-constituity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07-FEB-1997;
23-JAN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-JAN-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         food hypersensitivity.
                                                                                                                                                                                                                                                                                                                                                                                              Composition containing peptide that induces cytotoxic T lymphocyte response, and helper peptide - can bind to human leucocyte antigen alleles, used to treat or prevent cancers, parasitic infections and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (EPIM-) EPIMMUNE INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sette A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1998-427679/36
                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 41; 51pp; English.
                                                                                                                                                                                                                                                                                                                                                                                  autoimmune disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7 vvpgaatpy
                                                                               Sequence
                                                                                                                 hypersensitivity.
   4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sidney J,
                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
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   Conservative
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97US-0036713.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Southwood
                       49.08;
     Score 25; DB 19;
Pred. No. 1.4e+02;
2; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ß
                                           Length 15;
                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             disease;
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                     Gaps
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                                           RESULT 32
W85164
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                                                                                                                                                                                            Matches
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         W85164;
                       W85164 standard; peptide;
                                                                                                                                                                                                    W85138-283 represent helper T-cell peptides, which can bind to the human leucocyte antigens (HLA) DR4w4, DR1 and DR7. The peptides are used in the course of the invention. The specification describes T-helper peptides that that induce a cytotoxic T lymphocyte (CTL) response, and the treatment or prevention of viral, fungal, bacterial or parasitic formalaria) or cancer (e.g. nepatitis, acquired immune deficiency syndrome or cancer or condyloma acuminatum). Helper T-cell peptides may be used disease, allograft rejection, allergy, Lyme disease, hepatitis, post-streptococcal endocarditis, glomerulonephritis and food
                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                 Claim 11; Page 37; 51pp; English.
                                                                                                                                                                                                                                                                                                                                                                                         Composition containing peptide that induces cytotoxic T lymphocyte response, and helper peptide - can bind to human leucocyte antigen alleles, used to treat or prevent cancers, parasitic infections and
                                                                                                                                  Local Similarity
les 4; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1998-427679/36.
                                                                                       4
                                                                                               1 VMAGVGSPY 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (EPIM-) EPIMMUNE INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-FEB-1997;
23-JAN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23-JAN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-JUL-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           acquired immune deficiency syndrome; malaria; cancer; allograft rejection; allergy; Lyme disease; hepatitis; post-streptococcal endocarditis; glomerulonephritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO9832456-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Plasmodium falciparum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Helper T-cell peptide; human cytotoxic T lymphocyte; CTL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          food hypersensitivity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Helper T-cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        W85181 standard; peptide; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16-FEB-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           W85181;
                                                                                   vvpgaatpy 12
                                                                                                                                                                                        15 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sidney J,
                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97US-0037432
97US-0036713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Peptide derived from a TRAP protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98WO-US01373
                                                                                                                                       49.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Southwood
                         15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTL;
                        À.
                                                                                                                    Score 25; DB 19; pred. No. 1.4e+02; 2; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           leucocyte antigen; HLA; DR4w4; DR1; DR7; hepatitis; autoimmune disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
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                                                                                                                                            Length 15;
                                                                                                                     Indels
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                                                                                                                  Gaps
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XX AC XXX DE XXX
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Best Local Similarity
Thes 4; Conserv
                                                                                                                            W85155
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                                                                                                                                                                                                                                                                               Helper T-cell peptide; human leucocyte antigen; HLA; DR4w4; DR1;
                          Helper T-cell peptide derived from a TRAP protein.
                                                                                       W85155
                                                             16-FEB-1999
                                                                                                                                                                                                                                                                                         W85138-283 represent helper T-cell peptides, which can bind to the human leucocyte antigens (HLA) DR4w4, DR1 and DR7. The peptides are used in the course of the invention. The specification describes T-helper peptides, that are used together to generate a CTL response, and the treatment or prevention of viral, fungal, bacterial or parasitic malaria) or cancer (e.g. hepatitis, acquired immune deficiency syndrome or cancer or condyloma acuminatum). Helper T-cell peptides may be used disease, allograft rejection, allergy, Lyme disease, hepatitis, post: streptococcal endocarditis, glomerulonephritis and food
                                                                                                       W85155 standard;
                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Composition containing peptide that induces cytotoxic T lymphocyte response, and helper peptide - can bind to human leucocyte antigen alleles, used to treat or prevent cancers, parasitic infections and
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 11; Page 37; 51pp; English.
                                                                                                                                    33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1998-427679/36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sette A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-FEB-1997;
23-JAN-1997;
                                                                                                                                                                                      1 VMAGVGSPY 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (EPIM-) EPIMMUNE INC.
                                                                                                                                                                3 vvpgaatpy 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Helper T-cell peptide; human leucocyte antigen; HLA; DR cytotoxic T lymphocyte; CTL; hepatitis; autoimmune dise acquired immune deficiency syndrome; malaria; cancer; allograft rejection; allargy; Lyme disease; hepatitis; post-streptococcal endocarditis; glomerulonephritis; food hypersensitivity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23-JAN-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Plasmodium falciparum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Helper T-cell peptide derived from a TRAP protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16-FEB-1999 (first entry)
                                                                                                                                                                                                                                                                        15 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sidney J,
                                                                                                                                                                                                              Conservative
                                                        (first entry)
                                                                                                       Peptide; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              97US-0037432.
97US-0036713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98WO-US01373.
                                                                                                                                                                                                                        49.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Southwood
                                                                                                                                                                                                        Score 25; DB
Pred. No. 1.4e
2; Mismatches
                                                                                                                                                                                                             <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               s
                                                                                                                                                                                                   autoimmune disease,
                                                                                                                                                                                                                           Length 15;
                                                                                                                                                                                                       Indels
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RESULT
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       W85138-283 represent helper T-cell peptides, which can bind to the human leucocyte antigens (HLA) DR4w4, DR1 and DR7. The peptides are used in the course of the invention. The specification describes peptides that that induce a cytotoxic T lymphocyte (CTL) response, and T-helper peptides, that are used together to generate a CTL response in the treatment or prevention of viral, fungal, bacterial or parasitic infections (e.g. hepatitis, acquired immune deficiency syndrome or malaria) or cancer (e.g. renal or cervical carcinoma, lymphoma, prostacancer or condyloma acuminatum). Helper T-cell peptides may be used alone to induce a helper T cell response, e.g. in cases of autoimmune disease, allograft rejection, allergy, Lyme disease, hepatitis, post-response titultis, glomerulonephritis and food by the presence of the control of the contr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Composition containing peptide that induces cytotoxic T lymphocyte response, and helper peptide - can bind to human leucocyte antigen alleles, used to treat or prevent cancers, parasitic infections and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      allograft rejection; allergy; Lyme disease; hepatitis; post-streptococcal endocarditis; glomerulonephritis; food hypersensitivity.
              neuroprotective; cardiant; cerebroprotective; cytostatic; antidiabetic; vulnery; STE20; protein kinase; STLK2; STLK3; STLK4; STLK5, STLK6, STLK 2C1, ZC2, ZC3, ZC4, KHS2, SULU1, SULU3, GEK2, PAK4; PAK5; antagonist;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          07-FEB-1997;
23-JAN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         W09832456-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Plasmodium falciparum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cytotoxic T lymphocyte; CTL; hepatitis; autoimmune disease; acquired immune deficiency syndrome; malaria; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 11; Page 37; 51pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    autoimmune disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1998-427679/36.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sette A,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23-JAN-1998;
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antibody;
                                                                                         antipsoriatic;
                                                                                                            Antirheumatic;
                                                                                                                                                       Human SULU1-derived peptide
                                                                                                                                                                                                        18-FEB-2000
                                                                                                                                                                                                                                                     Y55981;
                                                                                                                                                                                                                                                                                                 Y55981 standard; Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           hypersensitivity.
                                                                                                                                                                                                                                                                                                                                               34
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 VMAGVGSPY 9
                                                                                                                                                                                                                                                                                                                                                                                                                vvpgaatpy 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sidney J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                        (first
                                                                                      antiathritic; antiinflammatory; antiallergic; osteopathic;
antiarteriosclerotic; antiasthmatic; immunosupressive;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97US-0037432
97US-0036713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98WO-US01373
                                                                                                                                                                                                     entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 49.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Southwood
rheumatoid arthritis;
                                                                                                                                                                                                                                                                                                      15
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3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 19;
1.4e+02;
artheroscierosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
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RESULT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        disease (e.g. Crohn's disease), asthma, osteoarthritis, psoriasis, atherosclerosis, rhinitis, autoimmunity, and organ transplantation, chronic inflammatory pelvic disease, multiple sclerosis, organ transplantation, myocardial infarction, cardiovascular disease, stroke, renal failure, oxidative stress-related neurodegenerative disorders (e.g. amylotrophic lateral sclerosis, Parkinson's disease and Leigh syndrome), cancer, cardiomyopathies, ischemic disorders, inflammatory disorders, cancer, cardiomyopathies, ischemic disorders, inflammatory disorders,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STLK7, ZC1, ZC2, ZC3, ZC4, KHS2, SULU1, SULU3, GEK2, PAK4 and PAK5. The proteins are used to identify agonists and antagonists, and to raise antibodies. The polynucleotides are useful in gene therapy protocols. The polynucleotides, polypeptides, antibodies, antagonists and agonists may be used to treat diseases such as immune-related disorders and diseases (e.g. rheumatoid arthritis, artherosclerosis, chronic inflammatory bowel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           myocardial infarction; cardiovascular disease; stroke; renal failure; oxidative stress-related neurodegenerative disorder; Parkinson's disease amylotrophic lateral sclerosis; Leigh syndrome; cancer; cardiomyopathy; ischemic disorder; inflammation; diabetes mellitus; fibrosis; mitosis; mesangial disorder; growth regulation; wound healing; T cell activation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel kinase-related polypeptides used for the of kinase-related diseases and disorders - \,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Plowman G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure;
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                                                                 07-AUG-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                          diabetes mellitus, fibrotic and mesangial disorders. The also be useful for cell growth regulation (e.g. in wound
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  rhinitis; autoimmunity; organ transplantation; multiple sclerosis
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                                                                                                                                 Y88496 standard;
                                                                                                                                                                                                                                                                                                                                                                                                            activation, mitosis
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                his sequence represents a peptide fragment from a novel STE20-related role in kinases. The invention relates to nucleic acid molecules encod kinase polypeptide selected from STLK2, STLK3, STLK5, STLK5, STLK6, TLK7, ZC1, ZC2, ZC3, ZC4, KHS2, SULU1, SULU3, GEK2, PAK4 and PAK5. Th
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                                                                                                                                                                                                                                                                                       Conservative
                                                               (first entry)
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Human leucocyte antigen; HLA class II; antigen epitope; pharmaceutical;

identification of HLA II binding antigen epitopes.

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Peptide #2 used in

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                                       Query Match
Best Local Similarity
Thes 4; Conserv
                                                                                                                                                                         The present invention relates to a new pharmaceutical composition a unit dose form of a peptide, or analogue, comprising an epitope selected from those represented by peptides Y98812-Y99339 which care derived from various antigens for various human lecucocyte antigen and cales of the present sequence is used in the peptide peptide/Analogue binds to an HLA class II molecule at an IC-50 of less clearly analogue binds to an HLA class II molecule at an IC-50 of less clearly analogue binds to an HLA class II molecule at an IC-50 of less clearly analogue binds to induce a helper T cell response. The clear invention. II binding assay in the examples of the invention. The pharmaceutical can be used to induce a helper T cell response. The pharmaceutical focuses the immune response towards selected determinants and could therefore be used in cases of chronic viral diseases and could therefore be used in cases of chronic viral diseases and could therefore be used in cases of chronic viral diseases and could therefore be used in cases of chronic viral diseases and could therefore be used in cases of chronic viral diseases and could therefore be used in cases of chronic viral diseases and could therefore be used in cases of chronic viral diseases and could therefore be used in cases of chronic viral diseases (rheumatoid arthritis, multiple sclerosis, and mysthenia gravis), allograft containing pharmaceutical include autoimmune diseases (rheumatoid cardinos), post-streptococcal custom disease, hepatitis and food hypersensitivities. The peptide epitopes administered with the peptides. Diseases which can be treated using immunogenic mixtures include prostate cancer, hepatitis B, and could prostate cancer, hepatitis B, and could mixture include prostate cancer, hepatitis B, and could mixture include prostate cancer, hepatitis B, to determine the susceptibility of an individual to a treatment regimen. The peptides may also be used to make monoclonal could be an include prostate and could hepaticular to a treatment regimen. The c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            immune response; chronic viral disease; cancer; autoimmune disease; rheumatoid arthritis; multiple sclercosis; myasthenia gravis; AIDS; allograft rejectio; allergy; lyme disease; hepatitis; prostate cancer; glomerulonephritis; food hypersensitivity; malaria.
                                                                                                                                                                       Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New compositions containing immunogenic peptide epitopes for various HLA class II DR molecules useful for inducing helper T cell response
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2000-097143/08
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Examples; Page 38; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28-MAY-1999;
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1 VMAGVGSPY 9
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                                                         Score 25; DB 21; Length 15;
Pred. No. 1.4e+02;
2; Mismatches 3; Indels
                                                         0
                                                         Gaps
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Search completed: December 12, 2000, 02:39:42 Job time: 12732 sec

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vvpgaatpy 15

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GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd
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OM protein - protein search, using sw model

Run on: December 12, 2000, 01:15:34; Search time 13.09 Seconds (without alignments) 48.480 Million cell updates/sec

Title: Perfect score: Sequence: US-08-860-232-12 51 1 VMAGVGSPYV 10

Scoring table:

Searched:

BLOSUM62 Gapop 10.0 , Gapext 0.5

182106 seqs, 63460219 residues

Total number of hits satisfying chosen parameters:

3930

Minimum DB seq Maximum DB seq length: 0 length: 20

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 75 summaries

PIR_65:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:* pir1:*
pir2:*
pir3:*
pir4:*

Database

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

in tig	A53608 S47366	2 2	13 14	ພ ພ ພ ພ ພ ພ	17 17	74 75
-cell receptor	H079	2	13	ω.	17	73
bosomal pr	876	N	13	ω.	17	72
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1 i Com	2850	s N	12	س بد	17	70
in -	OBO	, ,	13		17	0 0
H chain V-D-J	РН1587	N	12	ω.	17	67
(IgM) r	B60228	Ν	12	ω.	17	99
llbladder s	-1	N	11	ω ·	17	65
heavy	C39111	N	10	Ψ	17	64
erm-activating	\sim	ພ	. 10	ω.	17	63
perm-activating		N	10	ω	17	62
heavy chain (N	و	ω.	17	61
ll receptor b	\sim	N	8	ω	17	60
tion-i	~1	ພ	6	ω ·	17	59
pper resistance	41	N	ر د	Ü	17	58
ypothetical prot	Ξ	2	20	5	18	57
halobenzoate	44	N	20		18	56
heavy chain [H	N	19		18	55
rinary tract st	56	N	18	ŗ	18	54
prot	5	N	18	ŗ	18	53
roteasom	S09085	2	17	5	18	52
leurone protein	40	N	17	5	18	51
n 36K chain	2	2	16		18	50
rojaracin -	46	N	16	5	18	49
ll recep	Ξ	N	15		18	48
30K protein - bovi	31	2	15	.51	18	47
	8	2	15	5	18	46
pothetical pro	S08209	2	15	.51	18	
cell re	프	ν	14	5	18	
g heavy chain DJ	Ξ	N	14	Г	18	
robable antic	4	N	11	٠.	18	42
gen variant	Ξ	N	11		18	4
collagen alpha 2/V	n	N I	9	5	18	40
sperm-activating p	5	S)	80	<u>ب</u>	18	9
ADH dehydrogena	8	N	7			ω 8
acity protein	3	N	20	<u>ი</u>	18.5	37
-transporting	S68394	2	19	7.	19	36
heavy chain DJ	Ξ	N	18	7.	19	<u>3</u> 5
scription fac	23	N	16	7.	19	34
H chain V-D-J	Ξ	N	16	7	. 19	ω ω
g heavy chair	Ä	2	16	7.	19	32
P)+ transhydr	44	N	15	.7	19	31
H chain V-	H16	N	14	7.	19	30

ALIGNMENTS

RESULT 1
149039
17-Cell receptor beta chain V-D-J-C region (V beta 6, J beta 2.7) - human (fragment)
C;Species: Homo saptens (man)
C;Date: 21-Jan-1994 #sequence_revision 18-Nov-1994 #text_change 30-May-1997
C;Accession: 149039
R;Rosenberg, W.M.; Moss, P.A.; Bell, J.I.
Eur. J. Immunol. 22, 541-549, 1992
A;Title: Variation in human T cell receptor V beta and J beta repertoire: analysis us A;Reference number: A49039; MUID:92164737
A;Reference number: A49039; MUID:92164737
A;Recession: 149039
A;Status: preliminary; not compared with conceptual translation
A;Residues: 1-19 - 1605>
A;Note: sequence extracted from NCBI backbone (NCBIP:90721)
C;Keywords: T-cell receptor

Length 19;

Query Match 49.0%; Best Local Similarity 57.1%; Matches 4; Conservative Score 25; DB 2; Le Pred. No. 1.6e+02; 1; Mismatches 2; Indels 0, Gaps

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A; Molecule type: DNA
A; Residues: 1-15 < LEV>
A; Experimental source: bone
C; Keywords: immunoglobulin
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PH.1591
Ig H chain V-D-J region (wild-type clone 142) - mouse (fragment)
C:Species: Mus musculus (house mouse)
C:Date: 02-Jun-1994 #sequence_revision 02-Jun-1994 #text_change 17-Mar-1999
C:Accession: PH1591
                                                                                                                                      A;Title: Molecular characterization of transgene-induced A;Reference number: PH1580; MUID:93301609 A;Accession: PH1610
                                                                                                                                                                                                                                                                                                         Ig H chain V-D-J region (wild-type clone 337) - mouse (fragment) C;Species: Mus musculus (house mouse) C;Date: 02-Jun-1994 #sequence_revision 02-Jun-1994 #text_change 17-Mar-1999 C;Date: 02-Jun-1994 #text_change 17-Mar-1999 C;Date: 02-Jun-1994 #text_change 17-Mar-1999 C;Date: 03-Jun-1994 #text_change 17-Mar-1994 Mtext_change 17-Mar-1999 C;Date: 03-Jun-1994 Mtext_change 17-Mar-1999 Mtext_change 17-Mar-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT
PH1610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    submitted to the EMBL Data Library, August 1994 A;Description: Human HLA-A0201 restricted recognition of A;Reference number: S47355 A;Accession: S47361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C:Species: Homo sapiens (man)
C:Date: 06-Jan-1995 #sequence_revision
C:Accession: S47361
                                                                                                                                                                                                                                      R;Levinson, D.A.; Campos-Torres, J.; Leder, J. Exp. Med. 178, 317-329, 1993
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C;Keywords: T-cell receptor
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A; Residues: 1-13 <LEH>
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A; Residues: 1-9 <LEV>
A; Experimental source: bone
C; Keywords: immunoglobulin
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                                   pre-B lymphocyte
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C;Accession: A49404
R;Brooks, E.G.; Balk, S.P.; Aupeix, K.; Colonna, M.; Strominger, J.L.; Groh-Spies, V. Proc. Natl. Acad. Sci. U.S.A. 90, 11787-11791, 1993
A;Title: Human T-cell receptor (TCR) alpha/beta + CD4-CD8- T cells express oligoclona A;Reference number: A49404; MUID:94089717
A;Accession: A49404
                                                                                                       C;Species: Homo sapiens (man)
C;Date: 07-Apr-1994 #sequence_revision 18-Nov-1994 #text_change
C;Accession: A49404
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A49404
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A; Residues: 1-15 <CHO>
C; Keywords: oxidoreductase
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submitted to JIPID, October 1994 
A;Reference number: PA0051 
A;Accession: PA0079
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A; Residues: 1-17 <MUR>
C; Keywords: glycoprotein; hydroxyproline
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  extensin - maize (fragment)
C;Species: Zea mays (maize)
C;Date: 19-Mar-1997 #sequence_revision 11-Jun-1999 #text_change 11-Jun-1999
C;Accession: S33609
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A; Status:
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   preliminary
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illarity 100.08; Pred. No.
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Pred. No. 4.7e+02;
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Pred. No. 2.2e+02
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T-cell receptor beta chain V-D-J region (clone 15) - rat (fragment)
C;Species: Rattus norvegicus (Norway rat)
C;Date: 09-Oct-1992 #sequence_revision 09-Oct-1992 #text_change 30-May-1997
C;Accession: PH0929
R;Gold, D.P.; Offner, H.; Sun, D.; Wiley, S.; Vandenbark, A.A.; Wilson, D.B.
J. Exp. Med. 174, 147-1476, 1991
A;Title: Analysis of T cell receptor beta chains in Lewis rats with experime A;Reference number: PH0891; MUID:92078857
A;Accession: PH0929
                                                                  RESULT
A24749
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A; Cross references: GB:S67426; NID:g455866; PIDN:AAB29274.1;
A; Experimental source: alpha/beta + CD4-CD8- T cells
A; Note: sequence extracted from NCBI backbone (NCBIN:141022, C; Keywords: T-cell receptor
neuropeptide A - bovine
C;Specles: Bos prinigenius taurus (cattle)
C;Date: 28-Jul-1987 #sequence_revision 28-Jul-1987
C;Accession: A24749
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A;Title: A TCP1-related molecular chaperone from plants refolds phytochrome to its photo A;Reference number: S33800; MUID:93288140
A;Accession: S33800
                                                                                                                                                                                                                                                                                                                                                                                                                Chaperone, TCP1-related - oat C;Species: Avena sativa (oat) C;Species: Avena sativa (oat) C;Date: 02-Dec:1993 #sequence_revision 27-Feb-1997 #text_change 17-Mar-1999 C;Accession: S33800
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A; ReSidues: 1-11 <GOL>
A; Experimental source: concanavalin
C; Keywords: T-cell receptor
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                  #text_change 31-Dec-1993
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A;Molecule type: protein A;Residues: 1-12 <LET>. A;Residues: 1-12 <LET>. C:Comment: Complex I, mitochondrial NADH-ubiquiquinone reductase, ranging from 5K to 75K.
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A;Accession: PQ0786
A;Molecute to the state of the sta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NADH dehydrogenase (EC 1.6.99.3) 26K chain - fava bean mitochondrion (fragment) NADH-relate names: complex I 26K chain; NADH-relate names: mitochondrion vicia faba (fava bean) C;Date: 03-May-1994 #sequence_revision 07-Oct-1994 #text_change 17-Mar-1999 C;Accession: PQ0786
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A; Residues: 1-11 <TSU>
A; Experimental source: bran
C; Comment: molecular weight 33K,
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C;Species: Oryza sativa (rice)
C;Date: 03-Feb-1994 #sequence_revision 03-Feb-1994 #text_change 11-Apr-1995
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A;Residues: 1-18 <YANN
C;Comment: The source of this peptide was
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A;Title: Isolation, sequencing, synthesis, and pharmacological characterization A;Reference number: A94074; MUID:88067985
A;Accession: A24749
                                                                                                                                                                                                                                                           A;Genome: mitochondr:
C;Keywords: electron
                                                                                                                                                                                                                                                                                                                                                          C; Comment: This enzyme catalyzes
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Pred. No. 8.8e+02;
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A; Molecule type: protein
A; Residues: 1-15 <STR>
C; Superfamily: nlathing
                                                  C:Species: Sus scrofa domestica (domestic pig)
C:Date: 31-Mar-1988 #sequence_revision 02-Jun-1988 #text_change
C:Accession: A22789
R:Stroobant, P: Waterfield, M.D.
EMBO J. 12, 2963-2967, 1994
A:Title: Purification and properties of porcine platelet-derived A:Reference number: A22789
A:Accession: A22789
                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Cross-references: EMBL:X60849; NID:g53876; PIDN:CAA43240.1; PID:g53877 A;Experimental source: T lymphocyte C;Keywords: T-cell receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C:Species: Mus musculus (house mouse)
C:Date: 17-Jul-1992 #sequence_revision
C:Accession: PH0755
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Blochim. Blophys. Acta 1162, 127-134, 1993
A;Title: Purification of macacque liver flavin-containing monooxygenase: A form
A;Reference number: S29830; MUID:93192283
A;Accession: S29830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            dimethylaniline monooxygenase (N-oxide-forming) (EC 1.14.13.8), hepatic - crab-eating N;Alternate names: flavin-containing monooxygenase C;Species: Macaca fascicularis (crab-eating macaque) C;Date: 19-Mar-1999 #sequence_revision 24-Mar-1999 #text_change 07-May-1999 C;Accession: S29830
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A;Reference number: PH0746; MUID:92078846
A;Accession: PH0755
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A; Residues: 1-14 <CAS>
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                                                                                                                                                                                                platelet-derived growth factor chain B - pig (fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 R;Casanova, J.L.; Romero, P.; Widmann, C.; Kourilsky, P.; Maryanski, J.L.
J. Exp. Med. 174, 1371–1383, 1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         T-cell receptor beta chain (QAll.3.2) - mouse (fragment)
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Pred. No. 1.1e+03;
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A;Molecule type: protein
A;Residues: 1-16 <DEV>
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A; Residues: 1-15 < RES>
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T-cell receptor delta chain V region (105.23) - mouse (fragment) C;Species: Mus musculus (house mouse) C;Date: 31-Aug-1990 #sequence_revision 31-Aug-1990 #text_change C;Accession: H35141 R;Sim, G.K.; Augustin, A. Cell 61, 397-405, 1990
                                                                                                                                                                                                                                                                                                                                                                                                                              J. Biol. Chem. 266, 16614-16621, 1991
A;Title: Photosystem II particles from Chlamydomonas reinhardtii. Purification, A;Reference number: A41170; MUID:91358452
A;Accession: A41170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C; Species: Chlamydomonas reinhardtii
C; Date: 05-Jun-1992 #sequence_revision 05-Jun-1992
C; Accession: A41170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R;Chies, J.A.; Lembezat, M.P.; Freitas, A.A.
Eur. J. Immunol. 24, 1657-1664, 1994
A;Title: Entry of B lymphocytes into the persistent
A;Reference number: 153392; MUID:94298870
A;Accession: 167525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C;Species: Mus sp. (mouse)
C;Date: 29-May-1998 #sequence_revision 29-May-1998
C;Accession: 167525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  photosystem II 6.1K protein – Chlamydomonas reinhardtii (fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ry, C.; Diner, B.A.; Popot, J.L.
Chem. 266, 16614-16621, 1991
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    mouse (fragment)

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Pred. No. 1.2e+03;
1; Mismatches 2
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Pred. No. 1.1e+03;
0; Mismatches 1
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R;Ko, M.S.; Wang, X.; Horton, J.H.; Hagen, M.D.; Takahashi, N.; Maezaki, Y.; Mamm. Genome 5, 349-355, 1994
A;Title: Genetic mapping of 40 cDNA clones on the mouse genome by PCR.
A;Reference number: 148934; MUID:94319082
A;Accession: 149408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cytochrome-c oxidase (EC 1.9.3.1) chain Va - western wild mouse (fragment) C;Species: Mus spretus (western wild mouse) C;Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 05-Nov-1999 C;Accession: I49408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 R;Obokata, J.; Mikami, K.; Hayashida, N.; Nakamura. Plant Physiol. 102, 1259-1267, 1933 A;Title: Molecular heterogeneity of photosystem I. A;Reference number: PQ0667; MUID:94105345 A;Accession: PQ0680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        photosystem I 5.6K K chain - common tobacco (fragment)
C:Species: Nicotiana tabacum (common tobacco)
C:Date: 19-May-1994 #sequence_revision 19-May-1994 #text_change 17-Mar-1999
C:Accession: PQ0680
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A;Accession: H35141
A;Status: preliminary; not compared with conceptu A;Molecule type: mRNA
A;Molecule type: mRNA
A;Residues: 1-16 <SIMDA
A;Residues: 1-16 
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A;Residues: 1-18 <OBO>
C;Keywords: chloroplast; photosynthesis; photosystem
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A; Residues: 1-18 < RES>
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1; Mismatches 0
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A; Residues: 1-20 <SEL>
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R;Duve, H.; Johnsen, A.H.; Scott, A.G.; Yu, C.G.; Yagi, K.J.; Tobe, S.S.; Thorpe, Proc. Natl. Acad. Sci. U.S.A. 90, 2456-2460, 1993
A;Title: Callatostatins: neuropeptides from the blowfly Calliphora vomitoria with A;Reference number: A47393; MUID:93211980
A;Accession: E47393
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C:Date: 28-Jun-1991 #sequence_revision 28-Jun-1991 #text_change 30-Sep-1993
C:Accession: A37988
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A;Title: The chicken retinoid-X-receptor-gamma A;Reference number: S46478; MUID:94311845
A;Accession: S46479
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C;Date: 15-Jul-1995 #sequence_revision 10-Nov-1995 #text_change 28-May-1999
C;Accession: S46479
                                                                                                                                                                                                                                                                                                                                         neuropeptide callatostatin 5 - bluebottle fly (Calliphora vomitoria) C;Species: Calliphora vomitoria C;Species: Calliphora vomitoria C;Date: 16-Feb-1994 #sequence_revision 18-Nov-1994 #text_change 03-Mar-1995 C;Accession: E47393
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A; Title: Purification and characterization
A; Reference number: A37988; MUID:91060608
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from NCBI backbone (NCBIP:128482)
Score 19; DB
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A; Molecule type: DNA
A; Residues: 1-11 <YAM>
A; Experimental source: B lymphocyte
C; Keywords: heteroforpmon
A;Molecule type: DNA
A;Residues: 1-13 <DOU>
A;Cross references: EMBL:X62348; NID:g11300; PID:g11302
A;Note: the source is designated as Cryptomonas phi
C;GenetLcs:
A;Gene: rp136
A;Genome: chloroplast
                                                                                                                                                                                                                                                                      ribosomal protein L36 - Cryptomonas sp. C;Species: chloroplast Cryptomonas sp. C;Date: 04-Dec-1992 #sequence_revision (C;Accession: S20578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R;Yamada, M.; Wasserman, R.; Reichard, B.A.; Shane, S.; Caton, A.J.; Rovera, J. Exp. Med. 173, 395-407, 1991
A;Title: Preferential utilization of specific immunoglobulin heavy chain divon, Reference number: PT0222; MUID:91108337
A;Accession: PT0250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                43.5K bile stone protein - unidentified bacterium (fragment)
C:Species: unidentified bacterium
C:Date: 07-Feb-1997 #sequence_revision 07-Feb-1997 #text_change 10-Jul-1998
C:Accession: F58501
R:Binette, J.P.; Binette, M.B.
submitted to the Protein Sequence Database, October 1996
A:Description: The proteins of kidney and gallbladder stones.
A:Reference number: A58501
A:Accession: F58501
                                                                                                                                                          FEBS Lett. 298, 93-96, 1992
A;Title: A secY homologue is found in the plastid genome of Cryptomonas Phi. A;Reference number: $20577; MUID:92183838
A;Accession: $20578
                                                                                                                                                                                                                                               R; Douglas, S.
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Best Local Similarity
""" Conserve
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C:Species: Homo sapiens (man)
C:Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 16-Aug-1996
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A:Molecule type: protein
A:Residues: 1-11 <BIN>
A:Experimental source: human bile with stones
A:Note: 6-Asn and 8-Ala were also found
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Pred. No. 1.3e+03;
Pred. No. 1.3e+03;
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Pred. No. 1.3e+03;
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C;Accession: PH1766
R;Porcelli, S.; Yockey, C.E.; Brenner, M.B.; Balk, J. Exp. Med. 178, 1-16, 193
                                                                T cell receptor alpha chain V region (clone 2V alpha 7.2-1) - human (fragment) C;Species: Homo sapiens (man) C;Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 16-Jul-1999
                                                                                                                     RESULT
PH1766
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A; Residues: 1-14 <SCH>
C; Superfamily: hypothalamic tetradecapeptide
C; Keywords: amidated carboxyl end; hypothalamus
F; 14/Modified site: amidated carboxyl end (Tyr)
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A;Molecule type: prote
A;Residues: 1-14 <KOM>
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Theor. Appl. Genet. 86, 935-942, 1993
A;Title: A rice protein library; a data
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      unidentified 6.0/60K protein [imported] - rice (fragment)
C;Species: Oryza sativa (rice)
C;Date: 20-Apr-2000 #sequence_revision 20-Apr-2000 #text_change 20-Apr-2000
C;Accession: PQ0598
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A; Title: Analysis of T cell antigen receptor (TCR) expression by
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A; Accession: PQ0698
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C;Date: 13-Jul-1981 #sequence_revision 13-Jul-1981 #text_change 23-Aug-1996
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3; Conservative
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Pred. No. 1.7e+03;
1; Mismatches 0
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Pred. No. 1.7e+03;
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Ig H chain V-D-J region - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Date: 02-Jun-1994 #sequence_revision 02-Jun-1994
C;Accession: PH1608; PH1603
R;Levinson, D.A.; Campos-Torres, J.; Leder, P.
                                                                                                                                            A; Molecule type: protein A; Residues: 1-5;6-10;11-15 C; Keywords: oxidoreductase
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S66443
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A; Residues: 1-14 <LEV2>
A; Experimental source: 1
C; Keywords: immunoglobu
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J. Exp. Med. 178, 317-329, 193
A;Title: Molecular characterization of transgene-induced
A;Reference number: PH1580; MUID:93301609
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A; Accession: PH1766
A; Status: preliminary
A; Molecule type: mRNA
A; Residues: 1-14 <POR>
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A; Residues: 1-14 <LEV>
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Pred. No. 1.7e+03;
"'Amatches 2;
                                                                          Score 19; DB 2; L, Pred. No. 1.8e+03; 2; Mismatches 2;
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Pred. No. 1.7e+03;
1; Mismatches 2;
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Query Match
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R;Vuorio, T.; Maity, S.N.; de Crombrugghe, B. J. Biol. Chem. 265, 22480-22486, 1990 A;Title: Purification and molecular cloning of A;Reference number: A23692; MUID:91093096
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J. Exp.: Med. 178, 317-329, 1993
A;Title: Molecular characterization of transgene-induced
A;Reference number: PH1580; MUID:93301609
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C;Species: Mus musculus (house mouse)
C;Date: 02-Jun-1994 #sequence_revision 02-Jun-1994 #text_change 17-Mar-1999
C;Accession: PH1589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R:Yamada, M.; Wasserman, R.; Reichard, B.A.; Shane, S.; Caton, A.J.; Rovera, G. J. Exp. Med. 173, 395-407, 1991
A;Title: Preferential utilization of specific immunoglobulin heavy chain diversity an A;Reference number: PT0222; MUID:91108337
A;Accession: PT0224
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C;Species: Homo sapiens (man)
C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 16-Aug-1996
A; Molecule type: mRNA
A; Residues: 1-16 <VUO:
A; Cross-references: GI
                                                                                                                                                                                                  transcription factor chain All, CCAAT-binding - rat (fragment) C;Species: Rattus norvegicus (Norway rat) C;Date: 04-Oct-1991 #sequence_revision 04-Oct-1991 #text_chang C;Accession: B23692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Molecule type: DNA
A; Residues: 1-16 <LEV>
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A; Residues: I-16 < YAM>
A; Residues: B-17 A; Experimental source: B-17 B; B; Note: the authors translated the stop codon
                                                                                   A; Reference number: A23692; A; Accession: B23692
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3; Conservative
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Pred. No. 1.9e+03
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Similarity 57.: 4; Conservative

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DB 2; 1.9e+03

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Gaps

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Maximum Match 100%
Listing first 75 summaries
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1: sp_archea:*
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51
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Gapop 10.0 , Gapext 0.5
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sp_organelle:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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20	20	20	20	20	21	21	21	21	21	21	22	22	23	23	24	26	26	26	Score
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12 Q86869	10 Q9S8F1	4 Q9UC85	2 Q9R599	10 P82322	4 075318	2 Q47614	5 Q9TQR9	5 077489	11 Q61331	10 P82325	_	12 Q9PY99	5 Q9TWNO	10 Q9S8Y3	2 Q9RQ22	2 Q9RFZ7	2 Q9RG03	2 Q9RG00	8 ID
Q86869 lymphocytic	Q9s8f1 zea mays (m	. Q9uc85 homo sapien	Q9r599 micrococcus	P82322 pisum sativ	075318 homo sapien	Q47614 escherichia	Q9tqr9 mammuthus p	077489 tupaia glis	Q61331 mus musculu	P82325 pisum sativ	Q9ucn0 homo sapien	Q9py99 murine hepa	Q9twn0 macrobdella	Q9s8y3 lupinus arb	Q9rq22 salmonella	Q9rfz7 mycoplasma	Q9rg03 mycoplasma	Q9rg00 mycoplasma	Description

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ALIGNMENTS

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O Q9RG00 PRELIMINARY; PRT; 13 AA. Q9RG00 (TrEMBLrel. 13, Created) Q1-MAY-2000 (TrEMBLrel. 13, Last sequence update) Q1-MAY-2000 (TrEMBLrel. 13, Last annotation update) HYPOTHETICAL 1.5 KDA PROTEIN (FRAGMENT). MYCOPLASMA capricolum subsp. capricolum. MYCOPLASMA CAPTICOLUM SUBSp. capricolum group; Mollicutes; Bacteria; Firmicutes; Bacillus/Clostridium group; Mollicutes;

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Thiaucourt F., Lorenzon S., David A.;
"Phylogeny of the Mycoplasma mycoides cluster
of a putative membrane protein gene.";
Submitted (JUN-1999) to the EMBL/GenBank/DDBJ
EMBL; AF162997; AAF15250.1; -.
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HYPOTHETICAL 2.1 KDA PROTEIN
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Ol-MAY-2000 (TrEMBLrel. 13, Last annotation update)
HYPOTHETICAL 1.7 KDA PROTEIN (FRACMENT).
Mycoplasma capricolum subsp. capricolum.
Bacteria; Firmicutes; Bacillus/Clostridium group; M
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                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                    capricolum group.
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"Phylogeny of the Mycoplasma mycoides
of a putative membrane protein gene.";
Submitted (JUN-1999) to the EMBL/GenBa
EMBL; AF16295; AAF15247.1;
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subsp. capricolum.
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"Genomic subtractive hybridization and selective capture of transcribed sequences identify a novel Salmonella typhimurium operon and putative transcriptional regulator that are absent Salmonella typhi genome.";
Infect. Immun. 67:5106-5116(1999).
                                                                                                                                                                                           Phytochemistry SEQUENCE 17 !
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Viruses; ssRNA positive-strand
Coronaviridae; Coronavirus.
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Macrobdella decora (North American leech).

Eukaryota; Metazoa; Annelida; Clitellata; Hirudinida; Hiru
Arynchobdellida; Hirudiniformes; Hirudinidae; Macrobdella.
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Best Local
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01-NOV-1996 (TrEMBLrel. 01, Created)
01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
01-MAY-1999 (TrEMBLrel. 10, Last annotation update)
01-MAY-1999 (TrEMBLrel. 10, Last annotation update)
N-ACETYLGLUCOSAMINE GALACTOSYLTRANSFERASE (BETA1-4GT)
Mus musculus (Mouse)
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01-JUN-2000 (TremBLrel. 14, I
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UNKNOWN PROTEIN FROM 2D-PAGE
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P82325;
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Chicz R.M., Urban R.G., Lane W.S., Gorga J.C., St Vignali D.A., Strominger J.L.;
"Predominant naturally processed peptides bound t from MHC-related molecules and are heterogeneous
          Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                       STRAIN=CV. DE GRACE: TISSUE=LEAF: Pelther J.B., Friso G., Kalume D.E., Adamska I., van Wijk K.J.; Proteomics of the chloroplast."; Plant Cell 12:0-0(2000).
                                                                                                                                                                                                                                                                                                                                                                                      Pisum sativum (Garden pea).
Eukaryota; Viridiplantae; Embryophyta; 'Magnoliophyta; eudicotyledons; Rosidae;
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
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SEQUENCE 17 AA; 2035
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          Craniata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
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Best Local S
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Best Local S
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Tupala
SEQUENCE FROM N.A.

MEDLINE; 2002977.

Greenwood A.D., Capelli C., Possnert G., Paab

"Nuclear DNA sequences from late Pleistocene

Mol. Biol. Evol. 16:1466-1473(1999).

EMBL; AF154874; AAF12750.1; -.
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                                                                                                                                                                                                         Mammuthus primigenius (Siberian woolly mammoth).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Proboscidea; Elephantidae; Mamm
                                                                                                                                                                                                                                                                                                                            01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
VON WILLEBRAND FACTOR (FRACMENT).
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MEDLINE: 89033997.
MARIARA R., Ando T., Kimura T., Narimatsu H.;
Nakazawa K., Ando T., Kimura T., Narimatsu H.;
"Cloning and sequencing of a full-length cDNA of m
acetylglucosamine (beta 1-4)galactosyltransferase.
J. Blochem. 104:165-168(1988).
EMBL: D00315; BAA00217:1; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q9TQR9
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Mammalia; Eutheria; Scandentia; Tupalidae; Tupaia.
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"Origin and divergence
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01-NOV-1998 (TrEMBLrel 08, L
01-NOV-1998 (TrEMBLrel 08, L
01-NOV-1998 (TEMBL) (D4 DOPAMINE RECEPTOR (D4DR) (
Tupala gils (Tree shrew)
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4; Conservative
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3; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     genes.";
39:217-224(1998).
0016198; BAA32036.1;
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ng of a full-length cDNA of mouse
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No. 1.4e+03;
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sene megafauna.";
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Best Loc
Matches
                                                             SEQUENCE FROM N.A.

MEDLINE; 98277453.

Hansen-Hagge T.E., Janssen J.W., H.
Seriu T., Jauch A., Becke D., Hoche
"An evolutionarily conserved gene of encodes a novel deubiquitinating engenomics 49:411-418(1998).

EMBL: AF022793; AAC23451.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            075318
075318;
01-NOV-1998
01-NOV-1998
01-NOV-1998
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Q47614;
Q1-NOV-1996
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STRAIN-K12, HFRC;
MEDLINE; 91123952.
Albrechtsen B., Ross B.M., Sq
"Transcriptional termination
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL; AF154873; AAF12749.1; NON_TER 1 1 1 NON_TER 18 18 SEQUENCE 18 AA; 1914 MW;
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Eukaryota; Metazoa;
Mammalia; Eutheria;
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EMBL; X56780; CAA40098.1; -.
SEQUENCE 20 AA; 2162 MW; D952ACD71
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conserved gene on human
biquitinating enzyme.";
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"Proteomics of the chloroplast.";
Plant Cell 12:0-0(2000)
-!- SUBCELLULAR LOCATION: CHLOROPLAST TI-
-!- DEVELOPMENTAL STAGE: UNFOLDED AND FU-
Chloroplast; Thylakoid membrane.
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SEQUENCE
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Biochem. Biophys.
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Anderluzzi D., Pedrini A.M.;
"Structural similarities between
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Bacteria; Firmicutes; Actinobacteria; Actinobac
Actinomycetales; Micrococcineae; Micrococcaceae
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Magnoliophyta; eudicotyledons;
Papillonoideae; Pisum.
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01-JUN-2000 (TIEMBLIEL 14, I
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Q9S8F1
ID Q9S
AC Q9
DT Q9
DT Q9
DT Q9
DT Q9
COC Q9

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Q86869
ID Q8
AC Q8
DT 01
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Best Local S
Matches 3
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Best Local
                 Q86869;
Q86869;
Q1-NOV-1996
Q1-NOV-1998
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Holt D.C.
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  PRODUCT,
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Zea mays (Maize).
Zea mays (Viridiplantae; F
Eukaryota; Viridiplantae; F
Magnoliophyta; Liliopsida;
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01-mAY-2000 (TrEMBLrel. 13, Created)
01-mAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
GLUTATHIONE S-TRANSFERASE ISOFORM II (EC 2.5.1.18) (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   target cell spectrum: identification Cancer Res. 55:1586-1589(1995). SEQUENCE 15 AA; 1415 MW; C1E1EC38
                                                                                                                                                                                                                                                                               isoform II from maize.";
Planta 196:295-302(1995)
SEQUENCE 15 AA; 1530 N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE; 95188211.
Takeuchi A., Miyamoto T., Yan Hayashi H., Onozaki K.;
"A human erythrocyte-derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (Human).
Eukaryota; Metazoa; (
Mammalia; Eutheria; I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
ERYTHROCYTE-DERIVED GROWTH-PROMOTING FACTOR (FRAGMENT).
                                                                                                                                                                                                                                                                                                                           Greenland A.J.;
"Characterization of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                                                                                        Similarity 3; Conserv
                                                                                                                                                                                                                                                                                                                                                                      95322859
6 (TrEMBLrel. 01, C:
6 (TrEMBLrel. 01, L:
8 (TrEMBLrel. 08, L:
UCT, S-RNA PRODUCT
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                                                                                                                                                                                                           Conservative
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                                                                        PRELIMINARY;
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Poales; Poaceae;
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            Created)
Last sequence update)
Last annotation updat
                                                                                                                                                                                                        Score 20; DB
Pred. No. 2e+C
1; Mismatches
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Pred.
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                                                                                                                                                                                                                                                                                 2F105C48F7DD3A56
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2e+03;
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RESULT
Q9T2J5
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Q9TT30
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MEDLINE; 95190990.

A Moskophidis D., Zinkernagel A...

T "Immunobiology of cytotoxic T-cel choriomeninglitis virus.";

T. Virol. 69:2187-2193(1995).

75753; AAB33673.1; -...

MW; 7
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Best Local S
Matches 4
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Best Local
Matches
            MEDLINE;
                                                Eukaryota; Viridiplantae; Embryophyta; Tracheophyta; Magnoliophyta; eudicotyledons; Asteridae; euasterids Solanaceae; Nicotiana.
                                                                              Chloroplast
                                                                                               01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
5.6 KDA PHOTOSYSTEM I PSAK PROTEIN (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Lymphocytic choriomeningitis virus.
Viruses; ssRNA negative-strand viruses; Arenaviridae;
[1]
                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa;
Mammalia; Eutheria;
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Obokata J., Mikami K., He
"Molecular heterogeneity
                                SEQUENCE.
                                                                                        Nicotiana tabacum
                                                                                                                                                                                                                                                                                                    MO1. Biol. Evol. 0:0-0(2000).
EMBL; AF205414; AAF23765.1; -
                                                                                                                                                                                                                                                                                                               Primates.";
Mol. Biol. Evol.
                                                                                                                                                                                                                                                                                                                                           TISSUE-BLOOD;
Francino M.P.,
                                                                                                                                                                                                                                                                                   SEQUENCE
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            94105345.
J., Mikami K.,
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                                                                                                                                                                                                                                     Conservative
                                                                                                                                                  PRELIMINARY;
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Waround t
                                                                                                                                                                                                                                                                                   1940 MW;
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Primates;
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57.1%;
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66.7%;
  Hayashida N., Nakamura M.,
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T-cell
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Last annotation update)
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Pred. No. 2e+03;
1; Mismatches
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  , Sugiura
psaE, psa
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                                                           Spermatophyta;
I; Solanales;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             lymphocytic
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  ura M.;
psaf,
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ADD DESCRIPTION OF THE SECTION OF TH
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Q62532
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Best Local S
Matches
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Best Local S
Matches 3
                                                                                           Q91380 PRELIMINARY;
Q91380;
01-NOV-1996 (TrEMBLrel. 01, C:
01-NOV-1996 (TrEMBLrel. 08, La
01-NOV-1998 (TrEMBLrel. 08, La
RETINOID-X-RECEPTOR-GAMMA (FRA
RXR-<GAMMA).
Gallus gallus (Chicken).
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Q62532;
Q1-JUN-1998
Q1-JUN-1998
Q1-JUN-1999
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VARIANT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL;
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Ko M.S.,
Nadeau J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   psaL are all present in isoforms in Nicotiana Plant Physiol. 102:1259-1267(1993). SEQUENCE 18 AA; 1950 MW; EB628B87F4F73A07
 SEQUENCE
                                     Archosauria;
Gallus.
                                                                       Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Genetic mapping of 40 cDNA clones on the mouse genome by PCR.";
Mamm. Genome 5:349-355(1994).

-i- FUNCTION: THIS PROTEIN IS ONE OF THE NUCLEAR-CODED POLYPEPTIDE CHAINS OF CYTOCHROME C OXIDASE, THE TERMINAL OXIDASE IN
MITOCHONDRIAL ELECTRON TRANSPORT.

-i- FUNCTION: THIS IS THE HEME A-CONTAINING CHAIN.

-i- CATALTTIC ACTIVITY: 4 FERROCYTOCHROME C + O(2) = 2 H(2)O + 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A. STRAIN-SPRET/EI; MEDLINE; 94319082.
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Eutheria; Rodentia;
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                                                       Neognathae;
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01, Last sequence upo
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A (FRAGMENT).
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ata; Craniata; Vertebrata; !
ata; Sciurognathi; Muridae;
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1; Mismatches
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1; Mismatches
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9533E5E252B20256
                                                     Craniata; Vertebrata;
; Galliformes; Phasiani
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Murinae; Mus
                                                       Phasianinae;
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Best Local S
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Best Local
Matches
                                                                   SEQUENCE.
SEQUENCE.
MEDLINE; 96085162.
Schulte S., Stoffel W.;
Schulte S., Stoffel W.;
"UDP galactose:ceramide galactorecorder Copurification, storage of the storage of th
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01-MAY-2000
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SEQUENCE
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
01-GOLENDROCYTE-SPECIFIC UDP-GALACTOSE:CERAMIDE
GALACTOSYLTRANSFERASE (FRAGMENT).
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Irrgang K.D., Shi L.X., Funk C., Schroder W.P.;

Irrgang K.D., Shi L.X., Funk C., Schroder W.P.;

"A nuclear-encoded subunit of the photosystem II

J. Biol. Chem. 270:17588-17593(1995).

SEQUENCE 19 AA; 2067 MW; 547B56337B5719E7 CRO
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Eukaryota; Viridiplantae; Embr;
Magnoliophyta; eudicotyledons;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-MAY-2000 (TrEMBLrel.
01-MAY-2000 (TrEMBLrel.
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6.1 KDA NUCLEAR-ENCODED
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"The chicken retinoid-X-receptor-gamma gene gives rise to species of mRNA with different patterns of expression.";
Biochem. J. 301:283-288(1994).
BMBL; S72435; AAB31348.1; -.
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Seleiro E
                                         two glycoproteins.";
Eur. J. Biochem. 233:947-953(1995)
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Eutheria;
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plantae; Embryophyta; Tracheophyta; Spermatophyta;
dicotyledons; Caryophyllidae; Caryophyllales;
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14, Last anno
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Martial J.A.;
"Isolation
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LOW DENSITY LIPOPROTEIN R
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SIGNAL
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J. Biol. Chem. 266:19079-19087(1991).
SEQUENCE 19 AA; 1861 MW; 4EEC931205620608
  SEQUENCE
                                                                                                                                                                                         Peers B.,
"Binding o
                                                                                                                                                                                                                                            SEQUENCE FROM N.A. MEDLINE; 93076813.
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Schneider W.J.;
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                                                                                                           Eur. J. Bioch
EMBL; X00368;
                                                                                                                                                                                                                                                                                                                        "Isolation and characterization EMBO J. 3:429-437(1984).
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Eukaryota; Metazoa; (
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                                                                                                     ., Nalda A.M., Monget P., Voz M.L., Belayew A., g of a 100-koa ubiquitous factor to the human pr r is required for its basal and hormone-regulate Biochem. 210:53-58(1992).
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3; Conservative
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Primates;
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Neognathae; Galliformes; Phasianidae; Phasiani
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Biochem.
SEQUENCE
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01-MAY-2000 (TrEMBLrel. 13,
01-MAY-2000 (TrEMBLrel. 13,
01-JUN-2000 (TrEMBLrel. 14,
ALKALINE PHOSPHODIESTERASE I
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NON_TER 1
SEQUENCE 13 AA; 15
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Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea
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Bacteria; Firmicutes; Bacillus/Clostridium
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                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                            Iwamatsu A., Takashima S.;
. Biol. Int. 29:579-586(1993).
5 AA; 1720 MW; C4FF771EBDC867E1
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Pred. No. 3e+05;
1; Mismatches
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1; Mismatches
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Pred. No. 3.1e+03;
l; Mismatches 2
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Q9T2Q4 PRELIMINARY;
Q9T2Q4;
Q9T2Q4;
01-MAY-2000 (TrEMBLrel. 13, C.
01-MAY-2000 (TrEMBLrel. 13, L.
01-MAY-2000 (TrEMBLrel. 13, L.
CHAPERONIN-60 LS3 FRAGMENT.
Brassica napus (Rape).
Mitochondrion.
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Q9TNQ3;
Q9TNQ3;
01-MAY-2000 (TrEMBLrel. 13, Cre
01-MAY-2000 (TrEMBLrel. 13, Las
01-MAY-2000 (TrEMBLrel. 13, Las
CLASS II HLA DR5 LIGAND.
HOMO Sapiens (Human).
Eukaryota; Metazoa; Chordata; C
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Q9UC53;
01-MAY-2000
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Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last snootation update)
77 KDA SPONTANEOUS RECURRENT ABORTION-ASSOCIATED HU
ANTIGEN/IGVHIII HOMOLOG (FRAGMENT).
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SEQUENCE
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rules.";
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SEQUENCE 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Miki S., Tanaka T., Suzuki T., Soma H.;
"Diagnostic relevance of abortion-associated human
expressed on the cell surface of tumour promoter-tr
syndrome cells.";
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Falk K., Rotzschke O., Stevanovic S., Jugal K., Rotzschke O., Stevanovic S., Jugal K., Do., Stevanovic S., Do., Steva
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6 AA; 1626 MW; C9C5ED2512FF3FB9
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Last sequence update)
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Pred. No. 3.1e
1; Mismatches
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Catarrhini; Hominidae;
                                                                                                                                              PRT;
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01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
2-ENCYL-COA HYDRATASE (FRAGMENT).
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MEDLINE; 94302168.

MEDLINE; 94302168.

Cloney L.P., Bekkaoui D.R., Feist G.L., La Cloney L.P., Bekkaoui D.R., Feist G.L., La "Brassica napus plastid and mitochondrial contain multiple distinct polypeptides."; Plant Physiol. 105:233-241(1994).

SEQUENCE 16 AA; 1901 MW; CFAE799B7C938
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                                                                                 SEQUENCE FROM N.A. MEDLINE; 93189582.
                                                                                                                                                                                         Mitochondrion.
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SEQUENCE 17
                                                                                                                                                                                                                                       MEDLINE; 96128220.
Fiedler H.R., Schmid R., Leu S., Shavit N., Strotmann H.;
"Isolation of CFOCF1 from Chlamydomonas reinhardtii cwl5
terminal amino acid sequences of the CFOCF1 subunits.";
FEBS Lett. 377:163-166(1995).
SEQUENCE 19 AA; 2081 MW; AOAC64A247D406A2 CRC64;
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SYNTHASE SUBUNIT II-B' (FRAGMENT).
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Query: US-08-860-232-12
Query length: 10
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-Q=/cgn2_1/USPTO_spool/US08860232/runat_11122000_153023_14112/app_query.fasta_1.68
-D==EST -QFWT=fastap -SUFFIX=rst -GAPOP=12.000 -GAPEXT=4.000
-MINMATCH=0.100 -LOOPEL=0.000 -LOOPEXT=0.000 -GAPOP=4.500
-QGAPEXT=0.050 -XGAPOP=10.000 -XGAPEXT=0.000 -FGAPOP=6.000
-FGAPEXT=7.000 -YGAPOP=10.000 -YGAPEXT=0.500 -DELOP=6.000
-DELEXT=7.000 -YGAPOP=10.000 -YGAPEXT=0.500 -DELOP=6.000
-DELEXT=7.000 -YGAPOP=10.000 -YGAPEXT=0.500 -TRANS=human40.cdi
-LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100 -THR_MIN=0
-ALIGN=15 -MODE=LOCAL -OUTFMT=pfs -NORM=ext -MINLEN=0
-MAXLEN=200000000 -USER=US08860332_@CGN1_1_1781 -NCPU=6
-ICPU=3 -LONGLOG -NO_XLPXY -WAIT -THREADS=1
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                                                                                                                                                                                                                                                                     D29356 HUMNKK4 Human epidermal AV032124 Mus musculus AII097982 vgB2c05.rl Barstead MF AA645141 vs72f02.rl Stratagene AII626890 vs72f02.rl Stratagene BB246964 BB246964 RIKEN füll-le AI648664 tx63911.xl NCI_CGAP_KI AN197689 xm85h01.xl NCI_CGAP_KI AV413366 AV413366 Lotus japonic AQ811654 HS_5460_B1_H03_SP6E RE AV423864 AV423884 Lotus japonic AII17420 ub78g08.rl Soares_mamm AQ727372 AV427332 Lotus japonic AII17420 ub78g08.rl Soares_mamm AQ727373 AV427332 Lotus japonic AII17420 ub78g08.rl Soares_mamm AQ72833 AV427332 Lotus japonic AII17420 ub78g08.rl Soares_mamm AQ72833 HS_5470_A1_B12_T7A RPCI AQ982666 RPCI-23-307D10.TV RPCI AQ982666 RPCI-23-307D10.TV RPCI AA950330 Vs99e03.rl Barstead mc AQ982668 RPCI-23-307E10.TV RPCI AA9682968 RPCI-23-307E10.TV RPCI AA9982968 MM21006A20F3R Gm-r102 BE283122 601103581F1 NCI_CGAP_I BE663147 CM2_BT0266-221199-037-15151074
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                      F15107 SSC9F02 Porcine small in AA690407 vu52c01.rl Soarcs_manu AA583896 nn64a10.sl NCI_CGAP_La AQ334126 HS_5010_AL_H11_T7 RPCI AQ164697 HS_3006_B2_D08_T7 CIT AL367987 WLBA21E08F1 WLBA Medic AQ96450 RPCI -23-387B20.TV RPCI AQ577192 nbxb0090H09f CUGI Rice BE203415 EST403437 KV1 Medicage
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gb_est34:BE248924
gb_gss21:AG013496
gb_gss17:AZ196516
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AUTHORS
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alignment_block:
US-08-860-232-12 x BE091535/rev
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This sequence was derived from the FAPESP/LICR Human Cancer Genome
Project. This entry can be seen in the following URL
(http://www.ludwig.org.br/scripts/gethtml2.p17t1=&t2=PMO-BT0730-280
300-001-b10&t3=2000-03-28&t4=1)
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Laboratory of Cancer Genetics
Ludwig Institute for Cancer R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Shotgun sequencing of the human transcriptome with ORF expressed
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1 (bases 1 to 590)

Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R., Nagai,M.A., da_Silva,W.Jr., Zago,M.A., Bordin,S., Costa,F.F.,
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PMO-BT0730-280300-001-b10 BT0730
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               quality sequence start: 6 quality sequence stop: 577. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                          /note="Organ: breast; Vector: pucl8; Site_1: SmaI; Site_2: SmaI; A min1-library was made by cloning products derived from ORESTES PCR (U.S. Letters Patent application No. 196, 716 - Ludwig Institute for Cancer Research) profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under low stringency conditions."
                                                                                                                                                                                                                                                                                                            stringency conditions.
161 c 151 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /dev_stage="Adult"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /clone_lib="BT0730"
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  of: BE091535
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Percent Identity:
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4 NF023H12DT1F1101 Dr
6 Homo sapiens genomi
6 SP_1032_A1_E06_SP6E
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seq_documentation_block:
LOCUS AI905418
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ORGANISM
                                                                            seq_name: gb_est13:AI905418
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                                                                                                                                                                                                                                       US-08-860-232-12 x AW414405
                                                                                                                                                                                                                                                                                                Percent Similarity: 100.000
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                                                                                                                    GTCATGGCTGGTGGGGTTCTCCATATGTG 56
                                                                                                                                                         ValMetAlaGlyValGlySerProTyrVal 10
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                                                                                                                                                                                                                                                                                                                  Quality:
Ratio:
AI905418 701 bp mRNA EST 30-MAR-20 RC-BT091-200199-085 BT091 Homo sapiens cDNA, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Email: Robert_Strausberg@nih.gov
Tissue Procurement: Lothar Henniphausen Ph.D., Chu-Xia Deng Ph.D.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
cDNA Sequencing by: Washington University Genome Sequencing Center
Clone distribution: NCI-CGAP clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Contact: Robert Strausberg, Ph.D. Tel: (301) 496-1550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tumor Gene Index Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; E
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae;
1 (bases 1 to 624)
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Mus musculus
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                                                                                                                                                                                                                                                                                                                                                                                                                                         140
                                                                                                                                                                                                                                                                                                                                                                                                                                             Library constructed by Life Technologies. Investigators providing samples: Lothar Hennighausen/Chu-Xia Deng, NIH Reference for transgenic model: Xu et al., Nature Genetics 22, 37-43 (1999)."
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Site_2: NotI; Cloned unidirectionally. Primer: Oli;
                                                                                                                                                                                                                                                                                                                  51.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /clone="IMAGE:2650631"
/clone_11b="NCI_CGAP_Mam3"
/tlssue_type="tumor, gross tissue"
/dev_stage="10 months"
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/strain="129 - C57/B6 -
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; Murinae; Mus
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ORGANISM
                                                                                                                  seq_documentation_block:
LOCUS AO625244
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                                                                                                                                                                       seq_name: gb_gss9:AQ625244
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                                                          AQ62524
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alignment_block:
US-08-860-232-12 x AI905418
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CITBI-E1-2650N19.TF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL (http://www.ludwig.org.br/seq/gethtml.pl?tl=RC&t2=RC-BT091-085.html&t3=200199&t4=1)
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Laboratory of Cancer Genetics
AQ625244.1 GI:5087636
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Fax: +55-11-2707001
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Mammalia; Eutheria;
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181 c 208 g 14
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/sex="female"
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/db_xref="taxon:9606"
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                                                                        CITBI-E1
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                                                                        Homo
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alignment_block:
US-08-860-232-12 x AQ625244
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ORGANISM
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Ratio: 5.125
Percent Similarity: 100.000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3 AlaGlyValGlySerProTyrVal 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCAGGAATTGGTAGCCCTTATGTG 526
Clemson University Genomics Institute Clemson University
100 Jordan Hall, Clemson, SC 29634, U: Tel: 864 656 7288
Fax: 864 656 4293
                                                                                                                                                                    Oryza sativa.
Oryza sativa
Cryza sativa
Eukaryota; Viridiplantae; Embryophyta; Tracheophyta; Spermatophyta;
Magnoliophyta; Liliopsida; Poales; Poaceae; Oryza.
1 (bases 1 to 650)
                                                                                                                                                                                                                                                                                                                        AQ575993 650 bp DNA GSS 02-JUN-1999 nbxb0088K20f CUGI Rice BAC Library Oryza sativa genomic clone nbxb0088K20f, DNA sequence.
                                                                                                                A BAC End Sequencing Framework to Unpublished (1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Seq primer: M13-21 Class: BAC ends.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   other_GSSs: CITBI-E1-2650N19.TR
Contact: Shaying Zhao, William Nierman,
Department of Eukaryotic Genomics
The Institute for Genomic Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Venter, J.C. Use of BAC End Sequences from CalTech Libraries for Sequence-Ready
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                                                                                              Contact: Wing RA
                                                                                                                                                        Wing, R.A. and Dean, R.A.
                                                                                                                                                                                                                                                                                        AQ575993.1 GI:4976478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    http://www.tigr.org/tdb/humgen/bac_end_search/bac_end_search.html
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Clones are available from Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Email: hbe@tigr.org
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Map Building
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Medical Center Dr., Rockville,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /cell_type="sperm"
/note="Vector: pBeloBAC11; Site_1: EcoRI; Site_2: EcoRI;
CalTech Human BAC Library D"
126 c 107 g 169 t 2 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"./db_xref="taxon:9606"
/clone="2650N19"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /clone_lib="CITBI-E1"
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                                     Clemson, SC 29634, USA
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                                                                                                                                  Sequence the Rice Genome
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alignment_block:
US-08-860-232-12 x AQ575993
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Ratio:
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Seq primer: TAATACGACTCACTATAGGG
Class: BAC ends
                                                                                                                                                                                        Yamanishi,K., Morishima,Y.-I., Ueda,E., Nonomura,K., Kibe,S., Yamanishi,K. and Yasuno,H. Cataloging of the genes expressed in human keratinocytes: analysis of 607 randomly isolated cDNA sequences
Contact: Kiyofumi Yamanishi
Department of Dermatology
                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 252)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
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                                                                                                                                                   Biochem. Biophys. Res. Commun.
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/Clone=lib="CUGI Rice BAC Library"
/tissue_type="Leaf"
/tissue_type="Leaf"
/lab host="E. coli DH10B"
/lab host="E. coli DH20B"
/note="Vector: pBeloBAC11; Site_1: HindIII; Site_2:
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/note="Vector: pBeloBAC11; Bloom HindIII; Site_2: HindIII; Site_2: HindIII; Bloom HindIII; Site_2: HindIII; Bloom H
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/db_xref="taxon:4530"
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/strain="Japonica"
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Gaps: 0
Percent Identity: 70.000
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JOURNAL COMMENT
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US-08-860-232-12 x D29356
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LOCUS AV032124
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Ratio: 4.000
Percent Similarity: 100.000
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                                                        source
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Carninci,P., Shibata,K., Ozawa,Y., Konno,H., Itoh,M., Alzawa,K., Akahira,S., Akiyama,J., Fukuda,S., Fukunishi,Y., Funayama,T., Hara,A., Hayatsu,N., Hori,F., Ishikawa,T., Itoh,M., Izawa,M., Kawai,J., Kikuchi,N., Kojima,Y., Matsuyama,T., Niltsuma,H., Oda,H., Owa,C., Shibata,Y., Shigemoto,Y., Shiraki,T., Sogabe,Y., Sugahara,Y., Suzuki,H., Tateno,M., Tomaru,Y., Tominaga,N., Watanabe,S., Yagama,M., Yamamura,T., Yokota,T., Yoshino,M., Nurawatsu,M., Okazaki,Y. and Hayashizaki,Y.
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Fax: 75-251-587
                                                                                                                      Email: genome-res@rtc.riken.go.jp
Thermostabilization and thermoactivation of thermolabile enzymes by
trehalose and its application for the synthesis of full length cDNA
(Proc. Natl. Acad. Sci. U.S.A. 95(2):520-524 (1998))
Transcriptional sequencing: A method for DNA sequencing using RNA
polymerase (Proc. Natl. Acad. Sci. U.S.A. 95(7):3455-3460 (1998))
Please visit our web site (http://genome.rtc.riken.go.jp) for
                                                                                                                                                                                                                                                                                                                                                                                                                                                RIKEN Mouse ESTs
Unpublished (1999)
Contact: Chie Owa
                                                                                                                                                                                                                                                                                                                                              3-1-1 Koyadai, Tsukuba, Ibaraki 305-0074, Japan
Tel: 81-298-36-9145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AV032124 Mus musculus adult C57BL/6J cerebellum Mus musculus cDNA clone 1500034B14, mRNA sequence.
                                                                                                                                                                                                                                                                                                                      Fax: 81-298-36-9098
                                                                                                                                                                                                                                                                                                                                                                                                                       Genome Science Laboratory
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                                                                                                            further details.
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/db_xref="taxon:9606"
/clone="454"
/clone="1454"
/clone="Homan epidermal keratinocyte"
/clone="tissue_type=Epidermis, cell_type=Keratinocyte,
cell_line=primary culture"
a 69 c 56 g 71 t 6 others
/organism="Mus musculus"
/strain="C57BL/6J"
                                                        Location/Qualifiers
1. .187
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REFERENCE
AUTHORS
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SOURCE
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US-08-860-232-12 x AV032124/rev
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LOCUS AI097982
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Ratio:
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                                                                                                                                                                                                                                                                                         Seq primer: -28m13 rev2 ET from Amersham
High quality sequence stop: 145.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                             Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Contact: Marra M/Mouse EST Project
WashIngton University School of MedicineP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       vg82c05.rl Barstead N
                                                                                                                                                                                                                                                                                                                                                                                                                           Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                           4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
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AI097982
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
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Eutheria;
1 to 193)
                                                                                                           /tissue_type="Kidney"
/dev_stage="6 weeks"
/lab_host="DH10B"
                                                                                                                                                                                                    /db_xref="taxon:10090"
/clone="IMAGE:872456"
                                                                                                                                                                                                                                          /organism="Mus musculus"
/strain="BALB/c"
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69 c 34 g
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/clone_lib="Mus musculus adult C57BL/6J cerebellum"
/sex="male"
                                                                                                                                                                    /sex="mixed"
                                                                                                                                                                                   /clone_lib="Barstead MPLRB1"
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6
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VERSION
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AUTHORS
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ORGANISM
BASE COUNT
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US-08-860-232-12 x AI097982/rev
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Percent Similarity:
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vs72f02.rl Stratagene mouse skin (#937313) Mus musculus cDNA clone
IMAGE:1151835 5', mRNA sequence.
AA645141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unpublished (1996)
Contact: Marra M/Mouse EST Project
WashU-HMI Mouse EST Project
Washington University School of MedicineP
4444 Forest Park Parkway, Box 8501, St. Ld
Tel: 314 286 1810
Fax: 314 286 1810
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Marra, M., Hillier, L., Allen, M., Bowles, M., Dietrich, N., Dubuc Geisel, S., Kucaba, T., Lacy, M., Le, M., Martin, J., Morris, M., Schellenberg, K., Steptoe, M., Tan, F., Underwood, K., Moore, B., Theising, B., Wylle, T., Lennon, G., Soares, B., Wilson, R. and Waterston, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
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    Location/Qualifiers
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                                /lab_host="SOLR (kanamycin resistant)"
/lab_host="SOLR (kanamycin resistant)"
/note="Organ: skin; Vector: pBluescript SK-; Site_1: EcoRI
/site_2: XhoI; Cloned unidirectionally. Primer: Oligo
dT. Whole skin from 11 week old C57BL/6 female mice.
Average insert size: 1.0 kb; Uni-ZAP XR Vector; ~5'
adaptor sequence: 5' GAATTCGGCACGAG 3' ~3' adaptor
sequence: 5' GAATTCTGTTTTTTTTTTTT 3'"
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/clone="IMAGE:1151835"
                                                                                                                                                                                                                                                                                                                                      /organism="Mus musculus"
/strain="C57BL/6"
                                                                                                                                                                                                                                                /sex="females"
                                                                                                                                                                                                   dev_stage="11 weeks old"
                                                                                                                                                                                                                                                                  clone_lib="Stratagene mouse skin (#937313)"
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US-08-860-232-12 x AA645141/rev
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alignment_block:
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LOCUS AI626890
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                                      Percent Similarity:
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Marra, M., Hillier, L., Kucaba, T., Martin, J., Beck, C., Wylie, T., Underwood, K., Steptoe, M., Theising, B., Allen, M., Bowers, Y., Person, B., Swaller, T., Gibbons, M., Pape, D., Harvey, N., Schurk, R., Ritter, E., Kohn, S., Shin, T., Jackson, Y., Cardenas, M., McCann, R., Waterston, R. and Wilson, R.

The WashU-NCI Mouse EST Project 1999
                                                                                 Quality:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL;
IMAGE Consortium (info@image.llnl.gov) for further i
MGI:625043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unpublished (1999)
Contact: Marra M/WashU-NCI Mouse EST Project 1999
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tel: 314 286 1800
Fax: 314 286 1810
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EST.
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                                                                                                                                                                                              59
                                                                                                                                                                                              sequence:
                                                                                                                                                                                                              /lab_host="SOLR (kanamycin resistant)"
/note="Organ: skin; Vector: pBluescript SK; Site_1: EcoRI
/note="Organ: skin; Vector: pBluescript SK; Site_1: EcoRI
/note="Organ: skin; Vector: pBluescript SK; Site_1: EcoRI
/note="Organ: stie_1: skin; Vector: Oligo
dT. whole skin from 11 week old C57BL/6 female mice.
dVerage insert size: 1.0 kb; Uni-ZAP XR Vector; -5'
adaptor sequence: 5' GAGTTTTTTTTTTTTTTTTT 3'"
sequence: 5' CTCGAGTTTTTTTTTTTTTTTTTT 3'"
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/strain="C57BL/6"
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/dev_stage="11 weeks old"
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/sex="females"
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/clone="IMAGE:1151835"
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US-08-860-232-12 x AI626890

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The WashU-NCI Mouse EST Project 1999
                                                                                                                                                                                                                                                                                             Quality:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This clone is available royalty-free through LLNL; contact the IMAGE Consortium (info@image.llnl.gov) for further information.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Contact: Marra M/WashU-NCI Mouse EST Project 1999
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
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314 286 1810
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//note-"Organ: skin; Vector: pBluescript SK-; Site_1:
//note-"Organ: skin; Vector: pBluescript SK-; Site_1:
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/strain="C57BL/6"
/db_xref="taxon:10090"
/clone="IMAGE:1151835"
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/dev_stage="11 weeks old"
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BB246984 RIKEN full-length enriched, 7 days neonate cerebellum Mus
musculus cDNA clone A730016020 3', mRNA sequence.
BB246984
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Thermostabilization and thermoactivation of thermolabile enzymes by trehalose and its application for the synthesis of full length cDNA. Proc. Natl. Acad. Sci. U.S.A. 95 (2), 520-524 (1998)
Itoh,M., Kitsunai,T., Akiyama,J., Shibata,K., Izawa,M., Kawai,J., Tomaru,Y., Carninci,P., Shibata,Y., Ozawa,Y., Muramatsu,M., Okazaki
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Carninci,P. and Hayashizaki,Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sciences Center
3-1-1 Koyadai, Tsukuba, Ibaraki 305-0074, Japan
Tel: +81-298-36-9013
Fax: +81-298-36-9098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Email: genome-res@rtc.riken.go.jp,
URL:http://genome.rtc.riken.go.jp/
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                visit our web site (http://genome.rtc.riken.go.jp) for
/note="Site_1: Sall; Site_2: BamHI; cDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken
                                                                                                                                                                                  /tissue_type="cerebellum"
/dev_stage="7 days neonate"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                     cerebellum"
                                                                                                                                                                                                                                                                                                                           /clone="A730016020"
/clone__lib="RIKEN full-length enriched,
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                                                                                                                                                                                                                                                                                                                                                                                                                                          ∕organism≖"Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                         /db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                       7 days neonate
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to prepare mouse tissues. 1st strand cDNA was

ORIGIN

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REFERENCE
AUTHORS
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ORGANISM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  seq_name: gb_est12:AI648664
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Ratio:
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tx63gll.xl NCI_CGAP_Utl
similar to contains Alu
                                                                                                                                                                                                                                                                                                  cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: Greg Lennon, Ph.D.
DNA Sequencing by: Washington University Genome Sequencing Center
Clone distribution: NCI-CGAP clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
www-bio.lnlnl.gov/bbrp/image/image/html
Insert Length: 860 Std Error: 0.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 298)

NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: Robert Strausberg, Ph.D. Tel: (301) 496-1550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unpublished (1997)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tumor Gene Index
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primer: -470UP from Gibco
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Robert_Strausberg@nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /clone="IMAGE:2274308"
/clone_lib="NCI_CGAP_Utl"
/clone_type="well-differentiated endometrial
/tissue_type="well-differentiated endometrial
adenocarcinoma, 7 pooled tumors"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   39.00
4.333
/note="Organ: uterus; Vector: pCMV-SPORT6; Site_1: Sall;
Site_2: NotI; Cloned unidirectionally. Primer: Oligo dT.
Average insert size 1.75 kb. Life Technologies catalog #:
                                                                                                                                                                            /db_xref="taxon:9606"
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                                                                                                                                                                                              /organism="Homo sapiens"
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Gaps: 0
Percent Identity: 55.556
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Homo sapiens cDNA clone IMAGE:2274308
repetitive element;, mRNA sequence.
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VERSION

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alignment_scores:

Quality:

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LOCUS AW197689
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 ValMetAlaGlyValGlySerProTyrVal 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unpublished (1997)
Contact: Robert Strausberg, Ph.D.
Tel: (301) 496-1550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AW197689 303 bp mRNA EST 29-NOV-1999 xm85h01.x1 NCI_CGAP_Kidl1 Homo sapiens cDNA clone IMAGE:2691025 3's similar to contains Alu repetitive element; mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CDNA Library Preparation: M. Bento Soares, Ph.D. CDNA Library Arrayed by: Greg Lennon, Ph.D. DNA Sequencing by: Washington University Genome Sequencing Center Clone distribution: NCI-CGAP clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Email: Robert_Strausberg@nih.gov
Tissue Procurement: Christopher Moskaluk, M.D., Ph.D., Michael
Emmert-Buck, M.D., Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 303)
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Seg primer: -40UP from Gibco.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
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                      90
              Fatima Bonaldo. To g
                                                 /note="Organ: kidney; Vector: pT7T3D-Pac (Pharmacia) with a modified polylinker; Site_1: Not I; Site_2: Eco RI; Plasmid DNA from the normalized library NCI_CGAP_Kid3 was prepared, and ss circles were made in vitro. Following HAP purification, this DNA was used as tracer in a subtractive hybridization reaction. The driver was PCR-amplified cDNAs from a pool of 5,000 clones made from the same library (cloneIDs 132376-132391, 1456007-1456775, and 1500552-1502855). Subtraction by Bento Soares and M. Fatima Bonaldo. "
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a 71 c
                                                                                                                                                                                                                                                                               /clone="IMAGE:2691025"
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/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
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VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                        alignment_block:
US-08-860-232-12 x AV413366/rev
                                                                                                                                                                                                                                                                                                                                                         BASE COUNT
ORIGIN
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US-08-860-232-12 x AW197689/rev
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LOCUS AV413366
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                                                                                                                                                                                                            Quality: 39.00
Ratio: 4.333
Percent Similarity: 100.000
                                                                                            Align seg 1/1 to reverse of: AV413366
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364 TTAACAGGAATAGGTTCACCGTACGTG 338
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                        3 AlaGlyValGlySerProTyrVal 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Lotus japonicus

Iotus japonicus

Eukaryota; Viridiplantae; Embryophyta; Tracheophyta; Spermatophyta;

Magnollophyta; eudlootyledons; core eudloots; Rosidae; eurosids I;

Fabales; Fabaceae; Papilionoldeae; Lotus.

E 1 (bases 1 to 365)

ES Asamizu, E., Nakamura, Y., Sato.S. and Tabata, S.

Generation of 7137 non-redundant expressed sequence tags from a

legume, Lotus japonicus

ONA Res. 7 (2), 127-130 (2000)

NE 20277479

NE 2027749

NE 2027749

NE 2027749

NE 2037749

NE 303784 Sisarazu, Nakamura

The First Laboratory for Plant Gene Research

Kazusa DNA Research Institute

Yana 1532-3, Kisarazu, Chiba 292-0812, Japan

Email: ynakamu@kazusa.or.jp, URL:http://www.kazusa.or.jp/en/plant/.

Iccation/Qualifiers
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AV413366 1 GI:7742542
EST.
                                                                                                                                                                                                                                                                                                                                                                                 108
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                                                                                                                                                                                                                                                                                                                                                                     /organism="Lotus japonicus"
/db_xref="taxon:33305"
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/clone="MwM331d09_r"
/clone_lib="Lotus japonicus young plants (two-week old)"
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/dev_stage="young plants (two-week old)"
/note="Yector: pBluescriptii SK-; Site_1: EcoRI; Site_2:
XhoI; isolate=Miyakojima MG-20"
a 74 c 100 g 83 t
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                                                                                                                                                                                                         Length: 9
Gaps: 0
Percent Identity: 66.667
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                                                                                            to: 365
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gb_pr6:HSP53001
gb_pat:A61761
gb_pr6:HSP53002
gb_pr6:HSP53003
gb_pr6:HSP53003
gb_pr6:HSP53004
                                                                                               9b_par: 189371

9b_pat: 189371

9b_pat: 189371

9b_pat: 175893

9b_pat: 172243

9b_pat: 122242

9b_pat: 167149

9b_pat: 167149

9b_pat: 167149

9b_pat: 189361

9b_pat: 189361

9b_pat: 18953

9b_pat: 18953

9b_pat: 18953

9b_pat: 18052763

9b_pat: 18052763

9b_pat: 1815358

9b_pat: 181358

9b_pat: 181358

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9b_pat: 181358
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9b_pat:AR052878

9b_pat:AR061772

9b_pat:AR061773

9b_pat:AR061774

9b_pat:AR062014

9b_pat:AR062014

9b_pat:AR062015
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9b_pr6: HSP53006
9b_pr6: HSP53007
9b_pr6: HSP53008
9b_pr6: HSP53009
9b_pr6: HSP53010
9b_pr6: HSP53011
       gb_pr7:HUMP53T
gb_pr7:MACP53A
gb_sy:AF192534
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Database length: -2111177393
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-Q-/cg02_1/USPTO_spool/US08860232/runat_11122000_-GAPEXT=4.000
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-LIST=45 -DOCALIGN=200 -THR_SCORE-PCt -THR_MAX=100 -THR_MIN=0
-ALIGN=15 -MODE-LOCAL -OUTFMT=pfs -NORM=ext -MINLEN=0
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to:

Percent Identity:

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gb_ro:SBU43902
gb_ro:MMTSP53
gb_pr7:U48957
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Human mRNA for mutated
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Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 735)
Farrell, P. J.
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p53 gene; p53 protein.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         p53 transformation suppressor Location/Qualifiers
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/db_xref="sUT:804433"
/db_xref="sUT:804433"
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1. .>735
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/isolate="Burkitts lymphoma
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /gene="p53"
/note="deletion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /evidence=experimental
l. .735
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i AJ001022 Marmata monax mRNA
i U48957 Macaca fascicularis
i AL035288 H.sapiens gene fro
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Quality:
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LOCUS HSP53002
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LOCUS A61761
DEFINITION Sequence 1 f.
ACCESSION A61761
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Ratio: 5.000
Percent Similarity: 100.000
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                                                                                                                         JOURNAL.
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             Farrell, P.J., Allan, G.J., Shanahan, F., Vousden, K.H. and Crook, T. p53 is frequently mutated in Burkitt's lymphoma cell lines EMBO J. 10 (10), 2879-2887 (1991) 92007731
                                                                            Submitted (03-JUN-1991) P.J. Farrell, Ludwig Inst for Cancer Res. St Mary's Hospital Med School, Norfolk Place, London W2 1PG, UK (bases 1 to 1179)
                                                                                                                                       Direct Submission
                                                                                                                                                             Farrell, P.J.
                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 1179)
                                                                                                                                                                                                                                                                                                                             Human mRNA for mutated
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /translation="MEEPQSDPSVEPPLSQETFSDLWKLLPENNVLSPLPSQAMDDLM LSPDDJEQWTEDPGFDEAPRHPEARPPLARPTPAAPRAPSWPLSSSYPSQKT YQGSYGFRLGFLHSGTAKSVTCTYSPALNKMFCQLAKTGPLLWDSSTPPSKYRSVVR ALYKQSQHWTEVVRRCPHHERCSDSDCLAPPQHLIRVESULDRUTSTPHSVVV PYEPPEVGSDCTTIHYNYMCNSSCMGGMNRRPILTIITLEDSSGNLLGRNSFEVRVCA CPGRDBATEEENLKKKGEPHHELPPGSTKRALPNNTSSSPQPKKKPLDGEYFTLQIRG
                                                                                                                                                                                                                                                                                         GI:506434
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340 c 289 g 221 t
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/db_xref="taxon:32644"
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/db_xref="GI:3715950"
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LOCUS HSP53003
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                        Submitted (03-JUN-1991) P.J. Farrell, Ludwig I St Mary's Hospital Med School, Norfolk Place, 2 (bases 1 to 1179)
Farrell, P.J., Allan, G.J., Shanahan, F., Vousden p53 is frequently mutated in Burkitt's lymphom EMBO J. 10 (10), 2879-2887 (1991)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Quality:
                                                                                                                    Direct Submission
                                                                                                                                     Farrell, P.J.
                                                                                                                                                             Primates; Catarrhini; Hominidae;
                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Vertebrata; Mammalia; Eutheria;
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p53 transformation suppressor gene
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PYEPPEVGSDCTTIHYNYMCNSSCMGGMRRFILTITILEDSSGNLLGRNSFEVRVCA
CPGRORRTEEENLIKKGEPHHELPGSTKRALPUNTSSSPOPKKKPLDGEVFTLOIRG
CPGRORRTEEENLKKDAOAGKEPGGSRAHSSHLKSKKGOSTSRHKKLMFKTEGPDS
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365 c
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/note="wild-type sequence"
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/isolate="Burkitts lymphoma
/db_xref="taxon:9606"
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LOCUS HSP53004
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1 (bases 1 to 1179)
Farrell,P.J.
                                                                                                                                     Farrell, P.J., Allan, G.J., Shanahan, F., Vousden, K.H. and Crook, T p53 is frequently mutated in Burkitt's lymphoma cell lines EMBO_J. 10 (10), 2879-2887 (1991)
                                                                                                                                                                                                Direct Submission
Submitted (03-JUN-1991) P.J. Farrell, Ludwig Inst for Cancer St Mary's Hospital Med School, Norfolk Place, London W2 1PG, 2 (bases 1 to 1179)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human mRNA for mutated
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CPGRDRRTEEENLRKKGEPHHELPPGSTKRALPNNTSSSPQPKKKPLMFKTEGPDS
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1. .>1179
/organism="Homo sapiens"
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/db_xref="taxon:9606"
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LOCUS HSP53005
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US-08-860-232-1 x HSP53004
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                                                                                                                                                        Submitted (03-JUN-1991) P.J. Farrell, Ludwig Inst for Cancer Res, St Mary's Hospital Med School, Norfolk Place, London W2 1PG, UK 2 (bases 1 to 1179)
Farrell, P.J., Allan, G.J., Shanahan, F., Vousden, K.H. and Crook, T. p53 is frequently mutated in Burkitt's lymphoma cell lines EMBO J. 10 (10), 2879-2887 (1991)
                                                                                                                           mutated
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p53 gene; p53 protein.
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Direct Submission
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1. .>1179
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/note="wild-type sequence"
/replace="t"
366 c 306 g 232
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PYEPPEVGSDCTTIHYNYMCNSSCMGGTNRRPILTIITLEDSSGNLLGRNSFEVRVCA
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1. .1179
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Farrell, P.J., Allan, G.J., Shanahan, F., Vousden, K.H. and Crook, T. p53 is frequently mutated in Burkitt's lymphoma cell lines EMBO_J. 10 (10), 2879-2887 (1991)
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                                                              /isolate-"Burkitts lymphoma cell line"
/db_xref-"taxon:9606"
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365 c
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PYEPPEVGSDCTTIHYNYICNSCMGGMRRPILTITIEDSSGNLLGRNSFEVRVCA
CPGRDRRTEEENLRKKGEPHHELPFOSTKRALPNNTSSSPOPKKKPLDGEYFTLOIRG
CPGRDRRTEEENLRKKGEPHHELPFOSTKRALPNNTSSSPOPKKKPLDGEYFTLOIRG
RERFEMFRELNEALELKDAQAGKEPGGSRAHSSHLKSKKGOSTSRHKKLMFKTEGPDS
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1. .1179
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Ratio: 5.000
Percent Similarity: 100.000
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                                                                                                                                                                                                                                                                                                                                                                                                                 x60016.1
p53 gene;
                                                                                                                                                                        Submitted (03-JUN-1991) P.J. Farrell, Ludwig Inst for Cancer Res, St Mary's Hospital Med School, Norfolk Place, London W2 1PG, UK 2 (bases 1 to 1179)
Farrell, P.J., Allan, G.J., Shanahan, F., Vousden, K.H. and Crook, T. p53 1s frequently mutated in Burkitt's lymphoma cell lines EMBO J. 10 (10), 2879-2887 (1991)
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Human mRNA for mutated
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1 (bases 1 to 1179)
                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
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                                                                                                                    p53 transformation suppressor Location/Qualifiers
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p53 protein.
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RERFEMFRELNEALELKDAQAGKEPGGSRAHSSHLKSKKGQSTSRHKKLMFKTEGPDS
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                                                                                                                                                                  Farrell, P.J., Allan, G.J., Shanahan, F., Vousden, K.H. and Crook, Tp53 is frequently mutated in Burkitt's lymphoma cell lines EMBO J. 10 (10), 2879-2887 (1991)
                                                                                                                                                                                                             Direct Submission
Submitted (03-JUN-1991) P.J. Farrell, Ludwig Inst for St Mary's Hospital Med School, Norfolk Place, London W 2 (bases 1 to 1179)
                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Vertebrata; Mammalia; Eutheria;
Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 1179)
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/note="wild-type sequence"
/replace="g"
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CPGRDRRTEEENLRKKGEPHHELPPGSTKRALPNNTSSSPQPKKKPLDGEYFTLQIRG
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                                                       cell_line="NAMALWA"
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Farrell,P.J., Allan,G.J., Shanahan,F., Vousden,K.H. and Crook,T. p53 is frequently mutated in Burkitt's lymphoma cell lines EMBO J. 10 (10), 2879-2887 (1991)
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1 (bases 1 to 1179)
Farrell,P.J.
Direct Submission
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CPGRDRRTEEENLRKKGEPHHELPPGSTKRALPNNTSSSPQPKKKPLDGEYFTLQIRG
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AIYKQSQHMTEVVRRCPHHERCSDSDGLAPPQHLIRVEGNLRVEYLDDRNTFRHSVVV
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Ratio: 5.000
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                                                                                                                                                                                                                                       Direct Submission
Submitted (03-JUN-1991) P.J. Farrell, Ludwig Ins
St Mary's Hospital Med School, Norfolk Place, Lo
2 (bases 1 to 1179)
Farrell, P.J., Allan, G.J., Shanahan, F., Vousden, K
p53 1s frequently mutated in Burkitt's lymphoma
EMBO_J.10 (10), 2879-2887 (1991)
                                                                                                                                                                                                           mutated
                                                                                                                                                                                                                             92007731
                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Vertebrata; Mammalia; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 1179)
Farrell,P.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 x60019.1 GI:506450
p53 gene; p53 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        x60019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human mRNA for mutated
                                                                                                                                                                                                                                                                                                                                                                                                                                                    human
                                                                                                                                                                                       p53 transformation suppressor Location/Qualifiers
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1. .>1179
/gene="p53"
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D"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /codon_start=1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /gene="p53"
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/replace="t"
367 c 305 g 232
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l. .1179
                                                                                                                     /isolate="Burkitts ly
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                                                                                                                                                       /organism≖"Homo sapiens"
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                                                     note-"cDNA"
                                                                                                   cell_line="RAJI"
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                                                                                                                                                                                                                                                                                                                                                                                                                  Eutheria;
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KEYWORDS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
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REFERENCE
AUTHORS
TITLE
JOURNAL
MEDLINE
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LOCUS HSP53011
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                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
TITLE
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                                       gene
  CDS
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1 (bases 1 to 1179)
Farrell, P.J.
Direct
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p53 gene;
                                                                                                                                                                                                                                                                                                   Submitted (03-JUN-1991) P.J. Farrell, Ludwig Inst for Cancer Res, St Mary's Hospital Med School, Norfolk Place, London W2 1PG, UK 2 (bases 1 to 1179)
Farrell, P.J., Allan, G.J., Shanahan, F., Vousden, K.H. and Crook, T. p53 is frequently mutated in Burkitt's lymphoma cell lines EMBO_J.10 (10), 2879-2887 (1991)
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Human mRNA for mutated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Quality:
                                                                                                                                                                                                                                                                mutated
                                                                                                                                                                                                                                                                                                                                                                                                                               Direct Submission
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1. .1179
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1. .>1179
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365 c
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p53 protein.
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                                                                               /note="cDNA"
                                                                                                /gene="p53"
                                                                                                                                          cell_line="RAMOS"
                                                                                                                                                                                                                                           ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /codon_start=1
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alignment_scores:
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LOCUS A61360
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Ratio: 5.000
Percent Similarity: 100.000
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                                                                                                                                                                                                                                                                           l (bases 1 to 1182)
Tocque, B., Dubs-Poterszman, M. and Wasylyk, B.
ANTAGONISTS OF THE ONCOGENIC ACTIVITY OF THE PROTEIN MDM2,
THEREOF IN THE TREATMENT OF CANCERS
Patent: WO 9709343-A 2 13-MAR-1997;
                                                                                                                                                                                                                                                                                                                                                                               unidentified. unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 2 from Patent W09709343.
                                                                                                                                                                                                                                             RHONE POULENC RORER SA (FR) Other publication FR 2738151 970307
                                                                                                                                                                                                                                                                                                                                                                                                                                 A61360.1 GI:3715771
                                                                                                                                                                                                                                                                                                                                                                                                                                                  A61360
                                                                                                                                                                                                                                                                                                                                                             unclassified
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/replace="t"
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761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /product="p53 transformation
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PYEPPEVGSDCTTIHYNYMCNSSCMGGMNRRPILTIITLEDSSGNLLGRNSFEVRVCA
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/note="wild-type
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                                                            /protein_id="CAA03589.1"
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                                                                                                                                                                            /db_xref="taxon:32644"
                                                                                                                                                                                                                              Location/Qualifiers
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                                                                                                                             /codon_start=1
                                                                                                                                           /note="unnamed protein product"
                                                                                                                                                                                               ∕organism="unidentified"
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Gaps:
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                                                                                                                                                                                                                                                                                                                 AND USE
             REFERENCE
AUTHORS
TITLE
JOURNAL
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FEATURES
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                                                                                                                                             DEFINITION
ACCESSION
VERSION
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KEYWORDS
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                                                                                                                               KEYWORDS
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TITLE
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                                                                                             ORGANISM
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DEFINITION ACCESSION VERSION

73

SOURCE ORGANISM

KEYWORDS

REFERENCE

AUTHORS TITLE

COMMENT

JOURNAL

FEATURES

source

CDS

BASE COUNT ORIGIN

variation

variation

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alignment_block:
US-08-860-232-1 x AR052878
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LOCUS AR061772
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FEATURES
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Ratio: 5.000
Percent Similarity: 100.000
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Percent Similarity:
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                                                                                                                                                                                                                                                                                 73 CTACTTCCTGAAAACAACGTTCTGTCCCCCTTG 105
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Sequence 215 from patent US 5833975.
AR052878
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             l (bases 1 to 1182)
Heisler, L.M., Fors, L. and Brow, M. AnnD.
Rapid detection of mutations in the p53
Patent: US 5843654-A 92 01-DEC-1998;
                                                                                                                                              Sequence 92 from patent
AR061772
AR061772.1 GI:5989463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Patent: US 5833975-A 215 10-NOV-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 (bases 1 to 1182)
Paoletti,E., Tartaglia,J. and Cox,W.I.
Canarypox virus expressing cytokine and/or tumor-associated antigen
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BASE COUNT ORIGIN alignment_scores: 55.00 Quality: 55.00 Ratio: 5.000 Percent Similarity: 100.000 alignment_block: US-08-860-232-1 x AR061772 Align seg 1/1 to: AR061772 from: 1 to: 1182 source 1. .1182 . /organism="unknown" 276 a 366 c 306 g Length: 11
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Silbs6/gcgdata/geneseq/geneseqn/Na1999. DAT: V141615

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-(q=/cgn2_1/USPTO_spool/US08860232/runat_11122000_154523_20768/app_query.fasta_1.67
-Q=/cgn2_1/USPTO_spool/US08860232/runat_1122000_
-DB=W_Geneseq_36 -QFWT=fastap -SUFFIX=rng -GAPOP=12.000
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-DELOP=6.000 -DELEXT=7.000 -START=1 -MATRIX=blosum62
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR_SCORE=pct
-THR_MAX=100 -THR_MIN=0 -ALIGN=15 -MODE-LOCAL -OUTFMT=pfs
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seq_documentation_block:
ID Q62357 standard; cDNA;
                                            alignment_scores:
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/SIDS6/gcgdata/geneseq/geneseqn/NA1999.DAT:Z23904
/SIDS6/gcgdata/geneseq/geneseqn/NA1997.DAT:X83003
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Percent Similarity:
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P-PSDB;
                                                                                                                                                          Antibodies specific for p53 are detected by binding to immobilised fragments of the p53 gene product containing the antibody-binding region. Preferred fragments contain amino acids 1-241, 40-349, 40-393, 66-241, 66-393, 237-349, 237-393 and esp. 9-33, 37-52 or
                                                                                                                                                                                                                                         Claim 13;
                                                                                                                                                                                                                                                                       screening
                                                                                                                                                                                                                                                                                      Non-radioactive detection of p53 specific antibodies - by capture on immobilised p53 or its fragments, then reaction with labelled second antibody, for diagnosis of tumours and suitable for
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-SEP-1993; .
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                                                                                              Sequence 723 BP; 152 A;
                                                                                                                            368-386. See (each of these
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                                                                                                                                                                                                                                        Page
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; cancer; tumour; antibody binding region; epitope;
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/product= p53(1-241)
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                                                                                              236 C;
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Percent Identity:
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                                                                                              G; 160 T; 0 other;
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CTACTTCCTGAAAACAACGTTCTGTCCCCCTTG 105

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Percent Similarity: 100.000
                                                                                                        US-08-860-232-1 x 252304
                                                                                                                                                                                                                                                 The present cDNA sequence encodes the human p53 isoform, p35. This p53 isoform is truncated to eliminate a substantial portion of the C-terminal end of the protein. The deleted portion correspond to those encoded by exon 7 and by exons corresponding to amino acids lying C-terminal to exon 7. p35 is useful as a marker of myocardial infarction (by the indication of hypoxia) and in the control of cell proliferation both in vivo and in vitro. It was able to increase the transactivation achieved through co-transfection with wild type p53. The combination of p35 with wild type p53 produce an enhanced inhibition of primary incorporation at 24 hours compared to wild type p53 alone.
                            208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dell'acqua G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-OCT-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human p53 isoform; p35; marker;
cell proliferation; cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                    Claim 18; Fig 4; 25pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                            Novel isoform of \mathfrak{p}53 useful as a marker of myocardial infarction and for controlling cellular proliferation
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24-JUL-2000
                                                                                                                                                                                                                           Sequence 1070 BP; 233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (BGHM ) BRIGHAM & WOMENS HOSPITAL INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-APR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human p35 (p53 isoform) cDNA
                          /SIDS6/gcgdata/geneseq/geneseqn/NA1995.DAT:Q97854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2000-317984/27.
DB; Y70714.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /SIDS6/gcgdata/geneseq/geneseqn/NA2000.DAT: 252304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98US-0103849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mann MJ,
                                                                              Z52304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99WO-US23319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers 136..921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /product=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CDNA; 1070 BP
                                                                                                                                                                        55.00
                                                                                                                                                                                                                           A; 338 C; 282 G;
                                                                            from:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Dzau VJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Human p35 protein"
                                                                                                                                              Percent
                                                                              to: 1070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            hypoxia; myocardial infarction; proliferative; ss.
                                                                                                                                             Gaps:
: Identity:
                                                                                                                                                                        Length:
                                                                                                                                                                                                                             217
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                                                                                                                                              100.000
                                                                                                                                                                                                                           0 other;
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seq_name:

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seq_documentation_block:
ID Q97854 standard; cDNA; 1181 BP
XX
AC Q97854;
XX
DT 06-DEC-1995 (first entry)
XX
DE Human p53 cDNA.
XX
Ubiquitin-conjugating enzyme;
KW cell proliferation; cancer; ps
XX
CS Homo sapiens.
XX
V Ubiquitin-conjugating enzyme;
KW Cell proliferation; cancer; ps
XX
Ubiquitin-conjugating enzyme;
XX
Ubiquitin-conjugating infibitors of ubit
XX
PN
13-JUL-1995:
XX
13-SEP-1994; 94US-0305520.
PR
04-JAN-1994; 94US-0305520.
PR
04-JAN-1994; 94US-0307993.
PR
23-MAY-1994; 94US-0307993.
PR
13-SEP-1994; 94US-0305520.
PR
13-SEP-1994; 94US-0305200.
PR
13-SEP-1994; 94US-0305200.
PR
13-SEP-1994; 94US-0305200.
PR
13-SEP-1994; 94US-0305200.
PR
13-SEP-1994; 94US-03052
XXXX
                                                                                                                                                                                                                                                                                                                                                                                                                                alignment_block:
US-08-860-232-1 x Q97854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        alignment_scores:
                                                                                   seq_documentation_block: ID Z27570 standard; cD
                                                                                                                                                                                                                                                                                                                                                                      Align seg 1/1 to: Q97854 from: 1 to: 1181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             an in vitro ubiquitin conjugating system.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human p53 cDNA (given in Q97854) was amplifted from a HeLa concluded in the primers given in Q97852-53. The gene was subcloned into a baculovirus vector for expression of recombinant p53 in Sf9 insect cells for use as a component of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 105-106; 157pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Identifying inhibitors of ubiquitin mediated proteolysis of cell cycle regulatory proteins - also new ubiquitin conjugating enzymes, their related nucleic acid, vectors, antibodies etc., useful for regulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ubiquitin-conjugating enzyme; p53 protein; cell cell proliferation; cancer; psoriasis; fibrosis;
                                                                                                                                                                                                                                               73 CTACTTCCTGAAAACAACGTTCTGTCCCCCTTG
                                                                                                                                                                                                                                                                               1 LeuLeuProGluAsnAsnValLeuSerProLeu
                                                                                                                                                                              /SIDS6/gcgdata/geneseq/geneseqn/NA1999.DAT:Z27570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Quality:
Ratio:
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                                                                                       CDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      366 C; 306 G; 234 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eckstein JW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps:
Percent Identity:
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100.000
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alignment_block:
US-08-860-232-1 x Z27570
                                                                                                                                                                                                                                                     alignment_scores:
                                                                                                                                                                                                                                                                                                                              This sequence encodes the human p53 protein. The invention relates to CC assays for identifying an inhibitor of ubiquitin-mediated proteolysis of a cell-cycle regulatory protein comprising contacting a candidate agent with an ubiquitin-conjugating system and measuring the level of ubiquitination. The ubiquitin-conjugating system comprises:

(a) a reconstituted protein mixture including a ubiquitin conjugating enzyme (UDCE) produced by the expression of a nucleic acid which hybridizes under high stringency conditions to human UDCE, Candida albicans UDCE, or Schizosaccharomyces pombe UDCE coding sequences;

(b) a regulatory protein; and (c) ubiquitin. The polynucleotides are useful for identifying ubiquitination inhibitors. The polynucleotides (c) cluster of the treatment and/or diagnosis of proliferative disorders of sectors contective disorders cancer, atherosclerosis, or restenosis, tissue connective disorders controlling mound baling and disorders is connective disorders.
                                                                                                                                                Quality: 55.00
Ratio: 5.000
Percent Similarity: 100.000
                                                                Align seg 1/1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-MAY-1994;
27-MAY-1994;
13-SEP-1994;
                                                                                                                                                                                                                                                                                  disorders, controlling wound healing, and disorders characterized by fibrosis (e.g. rheumatoid arthritis, insulin dependent diabetes mell glomerulonephritis, cirrhosis, and scleroderma).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ubiquitin conjugating enzyme; UDCE; ubiquitin-mediated proteolysis; cell-cycle regulatory protein; ubiquitination inhibitor; atherosclerosis; proliferative disorder; cancer; restenosis; tissue connective disorder; wound healing; fibrosis disorder; rheumatoid arthritis; scleroderma;
                                                                                                                                                                                                                                                 Sequence 1181 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             insulin dependent diabetes mellitus; glomerulonephritis; cirrhosis;
diagnosis; therapy; p53; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 2; Column 97-100;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Identifying ubiquitination inhibitors using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          P-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1999-590402/50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chiu MI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (MITO-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-JAN-1994;
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 73
                                 ب
               LeuLeuProGluAsnAsnValLeuSerProLeu 11
CTACTTCCTGAAAACAACGTTCTGTCCCCCTTG 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Y39970
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                                                            to:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         94US-0247904.
94US-0250795.
94US-0305520.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              95US-0486663
                                                                                                                                                                                                                                                 275 A; 366 C; 306 G; 234 T; 0 other;
                                                                from: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Berlin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61pp;
                                                                                                                                              Length:
Gaps:
Percent Identity:
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                                                                1181
                                                                                                                                              : 11
: 0
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                                                                                                                                                                                                                                                                                                    diabetes mellitus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Z
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seq_name: /SIDS6/gcgdata/geneseq/geneseqn/NA1992.DAT:Q22995

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seq_documentation_block:
ID Q67884 standard; DNA.
XX
AC Q67884;
XX
DT 23-MAR-1995 (first of the control of the 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       alignment_block:
US-08-860-232-1 x Q22995
                                                                                                                                                                                                                                                                                                        seq_name: /SIDS6/gcgdata/geneseq/geneseqn/NA1994.DAT:Q67884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     alignment_scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Align seg 1/1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ratio:
Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   p53 cDNA, or its gene prods., can be used to suppress and eradicate cancers caused by defective, mutant or absent cancer suppressor genes. Variant forms of p53 are found in human breast, lung or colon carcinoma, lymphoma, leukaemia, etc., suggesting that mutation of the p53 genes is involved in oncogenesis. Specifically 273 Arg is replaced by 273 His, a mutation found exclusively in tumour cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cloned p53 cDNA and protein prods. - for suppression of neoplastic phenotype e.g. in osteo-sarcuma(s), leukaemia(s),
                                                                                              23-MAR-1995 (first entry)
                                                                                                                                                                                                                   Q67884 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 5; Page 15; 25pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cancer therapy; cancer suppressor gene; oncogenesis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence encoding 53 kD cellular protein.
                                                                                                                                                                                                                                                                                                                                                                       73
                                                                                                                                                                                                                                                                                                                                                                                                                                   1 LeuLeuProGluAsnAsnValLeuSerProLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Quality:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               to: Q22995
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5.000
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1..1182
                                                                                                                                                                                                                   1182 BP
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Gaps:
Percent Identity:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                303 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                11
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0
100.000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     mutation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            . * 5
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alignment_scores:
Quali
TXXXXXXXXXXX
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                                                                                                                                                                                                                                                                                                                       Align seg 1/1 to: Q67884
                                                                                                                                                                                                                                                                                                                                                       US-08-860-232-1 x Q67884
                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    position 524, changing an arg residue at position 175 to a His residue. The plasmid pMM110 (see also 067864) contains the vaccinia H6 promoter and the wild type human p53 gene in the ALVAC C5 insertion site. The mutant p53 gene was obtained from plasmid Cx22A and cloned into pMM110 to generate pMM143. Recombination between pMM143 and ALVAC rescuing virus produced recombinant virus vCP270, which contains the vaccinia H6 promoted mutated human p53 in the C5 locus. The resulting virus may be used in a composition for inducing an antigenic or immunological response, ie. for immunisation against pathogens.
     leukaemia
      osteosarcoma cel
leukaemia cells;
                 p53 gene; cancer; carcinoma; neoplastic; neoplasia; phenotype;
osteosarcoma cells; lung carcinoma cells; lymphoma cells;
                                                                     Wild type p53
                                                                                                    29-OCT-1996 (first entry)
                                                                                                                                                                       T29719 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This sequence represents the wildtype human p53 gene from the translationity that the stop codon. This sequence was used in the construction of an ALVAC-based recombinant virus containing a mutant form of the human p53 gene. The mutant form has a GAA substitution at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cox WI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Polymerase chain reaction; primer; amplify; NYVAC; ALYAC; recombinan murine; interleukin-2; IL-2; pRW825; pmut-1; pBS-SK; pWM151; TK vectplasmid; vaccinia; H6 promoter; amplify; primer; antigenic response; polymerase chain reaction; poxylrus; pSD542; immunological response;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1994-263767/32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (VIRO-) VIROGENETICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-JAN-1993;
19-JAN-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO9416716-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA encoding cytokine and/or tumour associated antigen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Attenuated recombinant virus used for cancer therapy -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-JAN-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                pathogen; human;
                                                                                                                                                                                                                                                        73
                                                                                                                                                                                                                                                        CTACTTCCTGAAAACAACGTTCTGTCCCCCTTG 105
                                                                                                                                                                                                                                                                                         LeuLeuProGluAsnAsnValLeuSerProLeu 11
                                                                                                                                                                                                                                                                                                                                                                                                                         Ratio:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Paoletti E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Fig 39; 232pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          вр;
                                                                     gene sequence
                                                                                                                                                                                                                                                                                                                                                                                                          : 5.000
: 100.000
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94US-0184009.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              94WO-US00888.
     ls; lung carcinoma cells;
soft tissue sarcoma cells
                                                                                                                                                                       CDNA; 1182 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                interferon;
                                                                                                                                                                                                                                                                                                                                                                                                                         55.00
5.000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         276 A; 365 C; 307 G; 234 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tartaglia
                                                                                                                                                                                                                                                                                                                       from:
                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Gaps:
Percent Identity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IFN; SS
                                                                                                                                                                                                                                                                                                                       to: 1182
      cells;
                                                                                                                                                                                                                                                                                                                                                                                                           100.000
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ΧIJ
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                                                                                                                                                                                                                                                                           alignment_block:
US-08-860-232-1
                                                                                                                                                                                                                                                                                                                                             alignment_scores:
                                                                                                                                                                                                                                                     Align seg 1/1
                                                                                                                                                                                                                                                                                                           Percent Similarity:
          Attenuated recombinant virus; cytokine; tumour associated antigen; NYVAC recombinant virus; ALVAC recombinant virus; gene therapy; raic cancer; tumour necrosis factor; nuclear phosphoprotein; p53; IL-2; interleukin; interferon; IFN-gamma; IL-4; melanoma associated antigencarcinoembryonic antigen; immunisation; antigenic; poxvirus; influe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chen
                                                                                Human
                                                                                                     19-OCT-1999
                                                                                                                                                  208529
                                                                                                                                                                                                                                                                                                                                                                             Sequence 1182 BP; 278 A;
                                                                                                                                                                                                                                                                                                                                                                                                 fashion include osteosarcoma cells, lung carcinoma cells, lyncells, leukaemia cells, soft tissue sarcoma cells or breast, or prostate carcinoma cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                The wild-type p53 gene can be used in the production of a for suppressing the neoplastic phenotype of a cancer cell endogenous wild type p53 protein. Cancer cells suppressed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; Page 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Use of wild-type p53 gene - in a medicament for suppressing neoplastic phenotype of a cancer cell lacking wild-type p53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1996-223439/23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-AUG-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  misc_difference
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         bladder cells;
 immunological response;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        P-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (REGC )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24-AUG-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08-MAY-1996
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                                                                                                                                                                                                                              ,
                                                                                                                                                                                                                    LeuLeuProGluAsnAsnValLeuSerProLeu
                                                                                                                                                                                                       CTACTTCCTGAAAACAACGTTCTGTCCCCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ָש
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sapiens
                                                                               p53
                                                                                                                                                 standard;
                                                                                                                                                                                                                                                                                                                                Quality:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               UNIV CALIFORNIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        R91933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Lee
                                                                                                                                                                                                                                                                                                                       Ratio:
                                                                               gene
                                                                                                                                                                                                                                                     to: T29719
                                                                                                                                                                                                                                                                           x T29719
                                                                                                                                                                                                                                                                                                          : 55.00
: 5.000
: 100.000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     90US-0573405
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19..21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /*tag=
                                                                                                                                                 DNA; 1182 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /transl_except= CAT encodes Aspartic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
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                                                                                                                                                                                                                                                     from:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               English
immunotherapy; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q
                                                                                                                                                                                                                                                                                                                                                                             366 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            p53
                                                                                                                                                                                                                                                                                                           Percent Identity:
                                                                                                                                                                                                                                                     protein
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0
                                                                                                                                                                                                                                                                                                                                                                             304 G; 234 T;
                                                                                                                                                                                                                                                    1182
                                                                                                                                                                                                                             11
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                                                                                                                                                                                                                                                                                                         : 11
: 0
: 100.000
                                                                                                                                                                                                                                                                                                                                                                             0
 Newcastle
                                                                                                                                                                                                                                                                                                                                                                             other;
                                                                                                                                                                                                                                                                                                                                                                                                                        1 ymphoma
                                                                                                                                                                                                                                                                                                                                                                                                                                             medicament
lacking
                                                                                                                                                                                                                                                                                                                                                                                                                                   in such
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protein
            influenza;
                      antigen;
                                           rabies
 SS
                                  GMCSF;
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                                              patient and therefore induces an immunological response. (1) may be used to vaccinate patients against a wide range of diseases and disorders depending on the type of antigen encoded by the exogenous DNA. (1) may be used to vaccinate against diseases such as rables, influenza and Newcastle Disease. It is particularly useful for immunothing against cancers. The poxvirus (1) also provides a means of manipulating 12 lymphocytes and tumour cells for use in cell-based immunotherapeutic modalities for cancer. (1) also have enhanced safety compared to unattenuated viruses (attenuation reduces the virulence of the viruses) and known recombinant poxvirus vaccines. This increased level of safety reduces the possibility of a 'runaway' infection in the host and reduces the chance of transmission from vaccinated to unvaccinated individuals and contamination of the environment. The present sequence represents a human p53 gene used in the exemplification of the present invention.
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20-OCT-1987;
25-APR-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention describes a recombinant poxvirus (I), comprising exogenous DNA encoding an antigenic determinant of a pathogen which is then expressed in vivo in infected host cells after administration to a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Recombinant poxviruses comprising exogenous DNA encoding antigenic determinants useful in immunotherapy to immunize against cancers and other diseases such as influenza, Newcastle Disease and rabies
Sequence 1182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1999-493494/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-MAY-1992;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 32; Fig 39; 163pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-JUN-1991;
16-DEC-1991;
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14-FEB-1990;
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27-AUG-1987;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
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14-APR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22-JUL-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14 -JUN-1990;
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BP; 276 A; 365 C; 307
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91US-0666056.

91US-0713967.

91US-0805567.

92US-0847977.

92US-0847951.

92US-0847951.

92US-081995.

92US-0918278.

93US-0007115.
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89US-0320471.

90US-0478179.

90US-0537882.

90US-0537890.
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87US-0090209
87US-0090711
87US-0110335
88US-0186054
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94US-0228926.
94US-0306259.
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G; 234 T; 0 other;
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alignment_scores: Quality: Ratio:

55.00

Percent Similarity: 100.000

Percent Identity: 100.000

Length: Gaps:

alignment_scores:

Quality: Ratio:

55.00

Length: Gaps:

11 0 100.000

Sequence 1185 BP;

277

A;

366 C;

305 G;

235 Ή,

N

other;

Percent Similarity:

5.000 100.000

Percent Identity:

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alignment_block:
US-08-860-232-1 x Z08529
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ID T27665 standard; DN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09-NOV-1994;
09-MAR-1995;
07-JUN-1995;
                         alternatively, microbial gene sequences. Cleavage products are compared to the cleavage products of reference gene sequences. The method is used for detecting mutation in the human p53 gene; for identifying strains of microorganisms, especially bacteria selected from the the group of members of the genera Campylobacter, Escherichia, Mycobacterium, Salmonella, Shigella and Staphylococcus The method may also be used for the identification of viruses, especially hepatitis C virus and simian immunodeficiency virus.
                                                                                                                                                                                                    Cleavage of nucleic acids using an enzyme, especially a nuclease selected from the group consisting of Cleavase (RTM) BN enzyme, Thermus aquatious DNA polymerase, Thermus thermophilus DNA
                                                                                                                                                                                                                                                                                                         Cleavage of nucleic acids to detect mutation(s) - allows detection esp. in human p53 gene, to identify strains of microorganisms and viruses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             p53; mutant; mutation; cleavage; nuclease;
Escherichia; Saccharomyces; Campylobacter;
Staphylococcus; identification; detection;
                                                                                                                                                                                                                                                                      Claim 28; Page 291; 433pp; English
                                                                                                                                                                                                                                                                                                                                                                                                    Oldenburg MC,
                                                                                                                                       oligonucleotide containing a human p53 gene sequence or alternatively, microbial gene sequences. Cleavage products are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human p53 gene
                                                                                                                                                                        polymerase, Escherichia coli ExoIII and the Saccharomyces cerevisiae Radl/Radl0 complex. The nucleic acid substrate is preferably an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09-NOV-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23-MAY-1996
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-AUG-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        73 CTACTTCCTGAAAACAACGTTCTGTCCCCCTTG 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 LeuLeuProGluAsnAsnValLeuSerProLeu 11
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95US-0402601.
95US-0484956.
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                                                                                                                                                                                                                                                                                                                                                                                                        JΕ,
                                                                                                                                                                                                                                                                                                                                                                                                                     Fors
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cleavase; Thermus;
Mycobacterium; Shi
ds.
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alignment_scores
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ID T27663 standard; DNA; 1203 BP.
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US-08-860-232-1 x T27665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       seq_name: /SIDS6/gcgdata/geneseq/geneseqn/NA1996.DAT:T27663
Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Align seg 1/1 to: T27665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-AUG-1995;
09-NOV-1994;
09-MAR-1995;
07-JUN-1995;
                                                                                                                                                                                                                     Cleavage of nucleic acids using an enzyme, especially a nuclease selected from the group consisting of Cleavase (RTM) BN enzyme, Thermus aquaticus DNA polymerase, Thermus thermophilus DNA polymerase, Escherichia coll ExoIII and the Saccharcomyces cerevisiae Radl/Radl0 complex. The nucleic acid substrate is preferably an oligonucleotide containing a human p53 gene sequence or
                                                                                                         alternatively, microbial gene sequences. Cleavage products are compared to the cleavage products of reference gene sequences. The method is used for detecting mutation in the human p53 gene; for identifying strains of microorganisms, especially bacteria selected from the the group of members of the genera Campylobacter, Escherichia, Mycobacterium, Salmonella, Shigella and Staphylococcus. The method may also be used for the identification of viruses, especially hepatitis C virus and simian immunodeficiency virus.
                                                                                                                                                                                                                                                                                                                                                                Cleavage of nucleic acids to esp. in human p53 gene, to id
                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                       Claim 28; Page 289-290; 433pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                     Oldenburg
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Brow MAD,
                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1996-259862/26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (THIR-) THIRD WAVE TECHNOLOGIES INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-NOV-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   W09615267-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Staphylococcus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     p53; mutant;
Escherichia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14-NOV-1996 (first entry)
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             Quality:
Ratio:
                                                                                  1203
                                                                                                                                                                                                                                                                                                                                                                                                                                  Dahlberg
MC, Olive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      mutation; cleavage; nuclease;
Saccharomyces; Campylobacter;
us; identification; detection;
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94US-0337164.
95US-0402601.
95US-0484956.
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100.000
             5.000
                                                                                 277 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                     JΕ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           from:
                                                                                                                                                                                                                                                                                                                                                                ds to detect mutation(s) - allows detection to identify strains of microorganisms and
                                                                                  366 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Fors L,
Percent Identity: 100.000
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                                                                                  306 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Heisler LM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1185
                          Length:
              Gaps:
                                                                                  235 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cleavase; Thermus;
Mycobacterium; Shigella;
ds.
                                                                                  19
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Lyamichev
                                                                                  other;
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seq_documentation_block: ID T27664 standard; DN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             seq_name:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    alignment_block:
US-08-860-232-1 x T27663
                      Cleavage of nucleic acids using an enzyme, especially a nuclease selected from the group consisting of Cleavase (RTM) BN enzyme, Thermus aquaticus DNA polymerase, Thermus thermophilus DNA polymerase, Escherichia coli ExoIII and the Saccharomyces cerevisiae Radl/Radl0 complex. The nucleic acid substrate is preferably an oligonucleotide containing a human p53 gene sequence or alternatively, microbial gene sequences. Cleavage products are compared to the cleavage products of reference gene sequences. The method is used for detecting mutation in the human p53 gene; for identifying strains of microorganisms, especially bacteria selected from the the group of members of the genera Campylobacter, Escherichia, Mycobacterium, Salmonella, Shigella and Staphylococcus. The method may also be used for the identification of viruses, especially hepatitis C virus and simian immunodeficiency virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Align seg 1/1 to: T27663
                                                                                                                                                                                                                                                                                                                                                                                                         30-AUG-1995;
09-NOV-1994;
09-MAR-1995;
07-JUN-1995;
Sequence
                                                                                                                                                                                                                              Claim 28; Page 290-291; 433pp; English.
                                                                                                                                                                                                                                                                       esp.
                                                                                                                                                                                                                                                                                   Cleavage of nucleic
                                                                                                                                                                                                                                                                                                                                                    Brow MAD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               p53; mutant; mutation; cleavage; nuclease;
Escherichia; Saccharomyces; Campylobacter;
Staphylococcus; identification; detection;
                                                                                                                                                                                                                                                          viruses
                                                                                                                                                                                                                                                                                                            WPI; 1996-259862/26
                                                                                                                                                                                                                                                                                                                                       Oldenburg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09-NOV-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23-MAY-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              W09615267-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14-NOV-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            T27664;
                                                                                                                                                                                                                                                                                                                                                                              (THIR-) THIRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human p53 gene sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 LeuLeuProGluAsnAsnValLeuSerProLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTACTTCCTGAAAACAACGTTCTGTCCCCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /SIDS6/gcgdata/geneseq/geneseqn/NA1996.DAT:T27664
                                                                                                                                                                                                                                                                     human
 1204
                                                                                                                                                                                                                                                                                                                                       ,
M
                                                                                                                                                                                                                                                                                                                                       Dahlberg
MC, Olive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
BP;
                                                                                                                                                                                                                                                                     p53
                                                                                                                                                                                                                                                                                                                                                                              WAVE TECHNOLOGIES
                                                                                                                                                                                                                                                                                                                                                                                                       95US-0520946.
94US-0337164.
95US-0402601.
95US-0484956.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           95WO-US14673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA;
 277
                                                                                                                                                                                                                                                                     gene,
                                                                                                                                                                                                                                                                                  acids to
                                                                                                                                                                                                                                                                                                                                        JΕ,
 ۶
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           from: 1
                                                                                                                                                                                                                                                                       ţ
 367
                                                                                                                                                                                                                                                                                                                                                     Fors
                                                                                                                                                                                                                                                                  co detect mutation(s) - allows detection
identify strains of microorganisms and
Ç
                                                                                                                                                                                                                                                                                                                                                    ŗ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          to: 1203
306 G;
                                                                                                                                                                                                                                                                                                                                                    Heisler LM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      105
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234
Τ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cleavase; Thermus; ....ochacterium; Shigella;
20
                                                                                                                                                                                                                                                                                                                                                    Lyamichev
 other;
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alignment_scores:
Quality:

Percent Similarity:

100.000

Percent Identity:

100.000

Gaps:

Ratio:

55.00 5.000

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alignment_block:
US-08-860-232-1 x T32836
                                                                                                                                                                    alignment_scores:
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ID T32836 standard; DN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         alignment_block:
US-08-860-232-1 x T27664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              seq_name: /SIDS6/gcgdata/geneseq/geneseqn/NA1996.DAT:T32836
                                                                                                                     Quality: 55.00
Ratio: 5.000
Percent Similarity: 100.000
                                             Align seg 1/1 to: T32836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Align seg 1/1 to: T27664
                                                                                                                                                                                                                                             An EcoRI-Sall DNA fragment (T32836) of plasmid pgEMhump53wt comprises a coding sequence (see also T32831) for human wild-type tumour suppressor p53 (W02617) but incorporates a kpnI site at codon 218, SstI site at codon 299, SstII at codon 333, BstBI at codon 38 and Sall immediately following the termination codon. These sites were incorporated by PCR to expedite construction of DNA sequences coding for p53 proteins bearing altered tetramerizations or point mutations for use in cancer therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                       New chimaeric p53 protein with heterologous tetramerisation doma - and related DNA and vectors, useful for treating abnormal cell proliferation, esp. cancer, auto-immune disease, etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chimeric
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     p53 protein; tumour suppressor; tetramerisation domain; chimaeric protein; gene therapy; vector; cell proliferation; apoptosis; autoimmune disease; immune tolerance; pGEMhump53;
                                                                                                                                                                                                                                                                                                                                                                                         Example 1; Page 85-86; 123pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-JUN-1995;
28-NOV-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chimeric synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human p53 EcoRI-Sall fragment.
                                                                                                                                                                                                                   Sequence 1215 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1996-286828/29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Halazonetis TD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-APR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27-NOV-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              06-JUN-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO9616989-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (WIST-) WISTAR INST ANATOMY & BIOLOGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 LeuLeuProGluAsnAsnValLeuSerProLeu
                1 LeuLeuProGluAsnAsnValLeuSerProLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTACTTCCTGAAAACAACGTTCTGTCCCCCTTG
Homo sapiens;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  95US-0456623.
94US-0347792.
95US-0431357.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                95WO-US15353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA; 1215 BP
                                                                                                                                                                                                                   286 A; 382 C; 310 G; 237 T; 0 other;
                                               from:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            from: 1
                                                                                                                          Percent Identity:
                                               ш
                                               6.
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                                               1215
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                105
                                                                                                                                                                                                                                                                 bearing altered tetramerization
                                                                                                                          100.000
                                                                                                                                                                                                                                                                                                                                                                                                                                                         domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cancer;
ds.
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alignment_block:

US-08-860-232-1 x V21730

Align seg 1/1

to: V21730

from:

L

to: 1242

Percent Similarity:

alignment_scores:

Quality: Ratio:

55.00 5.000 100.000

Percent Identity:

100.000

Gaps:

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seq_documentation_block:
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Sequence 1242
                      mammalian cells but are capable of extended stable expression of the target sequence, generating an immune response in immunised individuals. The vectors selectively elicit immune responses to the target sequences with little or no immune response to the other components of the vectors. The vectors are particularly useful in accommodating monomorphic and polymorphic nucleic acid sequences encoding tumor antigens via PCR technology.
                                                                                                                          This sequence comprises human p53 cDNA. Primers (see V21728-29) from p53 cDNA can be used to target p53 sequences into novel humanised polynucleotide vectors such as plasmid pITL (see V21724). These humanised vectors comprise a human-derived promoter (or mammalian homologue) which is functional in mammalian target tissue and cells and a sequence acceptance site which accepts cDNA products from RT-PCR cloning. The vectors are non-replicating in
                                                                                                                                                                                                                                                                         Humanised polynucleotide vectors - and sequence acceptance site, used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100 CTACTTCCTGAAAACAACGTTCTGTCCCCCTTG 132
                                                                                                                                                                                                                                                                                                                                                Nelson EL, Nelson PJ;
                                                                                                                                                                                                                                                                                                                                                                                                         14-AUG-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                      14-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19-FEB-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      primer_bind
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                primer_bind
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        human; p53; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Vector; vaccine; tumour; antigen; plasmid pITL-hHER/neu;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human p53 cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-AUG-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         V21730 standard; cDNA; 1242 BP
                                                                                                                                                                                                                                              Example 9; Page 90; 125pp; English.
                                                                                                                                                                                                                                                                                                                                                                             (USSH ) US DEPT HEALTH & HUMAN SERVICES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO9806863-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /SIDS6/gcgdata/geneseq/geneseqn/NA1998.DAT:V21730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
вP;
                                                                                                                                                                                                                                                                                                                                                                                                        96US-0023931.
                                                                                                                                                                                                                                                                                                                                                                                                                                      97WO-US14306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /*tag= a
/note= "primer 1"
985..1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              complement (360..386)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note= "primer 2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
282 A;
388
Ç
320 G;
                                                                                                                                                                                                                                                                         comprising human derived promoter for the production of vaccines
252
Η,
0
other;
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LeuLeuProGluAsnAsnValLeuSerProLeu

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alignment_block:
US-08-860-232-1 x X04533
                                                                   alignment_scores:
Quality:
                                                                                                                              seq_documentation_block:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          seq_name: /SIDS6/gcgdata/geneseq/geneseqn/NA1999.DAT:X04533
                                         Percent Similarity:
                                                                                                                                                                 The present sequence encodes a human p53 protein. The protein is used in the assay of the invention. The specification describes an assay method for a compound able to modulate the interaction between ATM or a protein having an associated kinase activity and p53 or a protein having homologous phosphorylation sites. The assay comprises contacting a peptide fragment ATM with a relevant fragment of p53 and a test compound, and determining the interaction or binding between the substances and the test compound. The assay method is useful for screening for compounds able to modulate the interaction between ATM and p53. The screened agents, peptide fragments and nucleic acids are useful for therapy involving modulating ATM action e.g. in the treatment of cancer, immunosuppression or HIV infections by modulating phosphorylation of p53 by ATM, and for purifying the proteins
                                                                                                                                                                                                                                                                                                                                                                                                Assay method for compounds modulating the interaction of ATM and useful for the treatment of e.g. cancer, immunosuppression and infections and for the purification of the proteins ATM and ATR
                                                                                                                                                                                                                                                                                                                                                                        Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16-JUL-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CDS
                                                                                                                              Sequence 1303 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1999-073587/07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16-JUL-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GB2327498-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ataxia telangiectasia; ATM protein; assay; interaction; kinase activity;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA encoding human p53 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  X04533 standard; DNA; 1303 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27-JAN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         X04533;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       73
                                                                                                                                                          and ATR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTACTTCCTGAAAACAACGTTCTGTCCCCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        screening; ATR;
                                                         Ratio:
                                                                                                                                                                                                                                                                                                                                                                       Fig 7b; 124pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Lakin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97GB-0014971
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                                         5.000
100.000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /product= p53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                              292
                                                                     55.00
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Smith GCM;
                                                                                                                              403
                                          Percent
                                                                                                                             Ç
                                                                                                                              348
                                          Identity:
                                                                                                                             <u>ن</u>
                                                                      Length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       105
                                                       Gaps:
                                                                                                                             260
                                                                                                                             Η;
                                         100.000
                                                                                                                             0
                                                                                                                             other;
                                                                                                                                                                                                                                                                                                                                                                                                                p53
HIV
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Align seg 1/1 to: X04533

from:

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Align seg 1/1

0:

B8000d

from:

to:

بر د ۰

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alignment_block:
US-08-860-232-1 x D00088
                                                                  alignment_scores:
Quality:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                seq_name: /SIDS6/gcgdata/geneseq/geneseqn/NA2000.DAT:D00088
                                         Percent Similarity:
                                                                                                                                                   The patent discloses a method for the treatment of systemic lupus erythematosus (SLE) by down-regulating the autoimmune response to the C-terminal DNA-binding domain of p53 protein by an active compound comprising C-terminal DNA-binding domain of p53, monoclonal antibodies (Ab1) specific to this domain, monoclonal antibodies (Ab2) specific to Ab1 and peptides based on the complementarity determining region of heavy and light chain of Ab1 and Ab2. The active compound is useful in the diagnosis, prevention and treatment of SLE in humans. The present sequence is a human tumour-associated antigen p53 DNA. Antibodies against the C-terminal DNA-binding domain of the p53 DNA.
                                                                                                                                                                                                                                                                                                                                                                  Treatment of systemic lupus erythematosus by down-regulating the autoimmune response to the C-terminal DNA-binding domain of the protein by an active compound comprising of antibodies to p53 or
                                                                                                                             Sequence 1307 BP;
                                                                                                                                                                                                                                                                                                                            Disclosure; Page 79-81; 87pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2000-339512/29.
P-PSDB; Y70811.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cohen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-APR-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SLE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human tumour-associated antigen p53 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (YEDA ) YEDA RES & DEV CO LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200023082-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              dermatological;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-JUL-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        D00088 standard; DNA; 1307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                systemic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tumour-associated antigen; p53 protein; DNA-binding domain; ological; immunosuppressive; antiinflammatory; autoimmune responsient to the continuous autoimmune responsies; treatment; prevention;
                                                      Ratio:
                                                                                                                                                                                                                                                                                                                                                         of p53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rotter V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                         55.00
5.000
100.000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98US-0104816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99WO-US24443
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126..1307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /*tag= a
/product= "p53 protein'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /*tag=
                                                                                                                            293 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Erez-Alon
                                                                                                                            404 C;
                                    Length: 11
Gaps: 0
Percent Identity: 100.000
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COLUSIN MANTE JESTAL SIALI

36.00 36.00

110. 104.72 .87

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| Strd Orig | ZScore | LSCORE | Sequence | Strd Orig | ZScore | LSCORE | Sequence | Strd Orig | ZScore | LSCORE | Sequence | Strd Orig | ZScore | LSCORE | Sequence | Strd Orig | ZScore | Strd Orig | ZScore | LSCORE | Sequence | Strd Orig | Strd Orig | ZScore | Strd Orig | Strd Orig
                                                                                                                                                                                                                                                                                                                                                                                                                        /cgn2_6/ptodata/1/ina/5C_COMB.seq:US-08-690-495-8-
/cgn2_6/ptodata/1/ina/5D_COMB.seq:US-08-690-494-8-
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/cgn2_6/ptodata/1/ina/FC_COMB.seq:US-08-690-495-9-
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/cgn2_6/ptodata/1/ina/5D_COMB.seq:US-08-690-494-9-
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Database sequences: 262060
Database length: 75620496
Search time (sec): 57.120000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Search information block: Query: US-08-860-232-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /cgn2_6/ptodata/1/ina/5C_COMB.seq:US:08-697-221-1 + 55
/cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:PCT-US95-15353-1 +
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/cgn2_6/ptodata/1/ina/5C_COMB.seq:US-08-458-356-103 +
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/cgn2_6/ptodata/1/ina/5A_COMB.seq:US-08-126-587C-8 -
/cgn2_6/ptodata/1/ina/5A_
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-Q=/Cgn2_1/USPTO_spool/US08860232/runat_11122000_154523_20748/app_query.fasta_1.67
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-FGAPOP=6.000 -FGAPEXT=7.000 -YGAPOP=10.000 -YGAPEXT=0.500
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-TRANS-human40.cd1 - LIST=45 - DOCALIGN=200 - THR_SCORE-pct
-THR_NAX=100 - THR_MIN=0 - ALIGN=15 - MODE-LOCAL - OUTFMT-pfs
-NORM-ext - MINLEN=0 - MAXLEN=2000000000
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-1 + 55.00 173.88 0.0422
+ 55.00 172.78 0.0422
+ 55.00 172.60 0.0431
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-1 40.00 145.17 1.45
-2 40.00 140.87 2.52
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38:50 112.51 95.93

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37.00 112.63 94.38

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seq_name: /cgn2_6/ptodata/1/ina/5D_COMB.seq:US-08-247-904B-11
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alignment_block:
US-08-860-232-1 x US-08-486-663A-18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            seq_name: /cgn2_6/ptodata/1/ina/5D_COMB.seq:US-08-486-663A-18
                                                                                                                                     Quality: 55.00
Ratio: 5.000
Percent Similarity: 100.000
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                                                            Align seg 1/1 to: US-08-486-663A-18 from: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 18,
Patent No. 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: (617) 227-594
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: ASCII(text)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/486,663A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE: Flop
COMPUTER: IBM PC
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Eckstein, Jens W. APPLICANT: Draetta, Giulio APPLICANT: Guillaume Cottarel TITLE OF INVENTION: Ubiquitin
                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                      MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STATE: MA
COUNTRY: US
ZIP: 02109
73 CTACTTCCTGAAAACAACGTTCTGTCCCCCTTG 105
                1 LeuLeuProGluAsnAsnValLeuSerProLeu 11
                                                                                                                                                                                                                                                     NAME/KEY: CDS
LOCATION: 1...
                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: MI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Vincent, Matthew REGISTRATION NUMBER: 36
                                                                                                                                                                                                                                                                                                                     TOPOLOGY:
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(617) 22
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IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                     linear
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Percent Identity:
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208.83
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seq_documentation_block:
; Sequence 11, Application US/08247904B
; Patent No. 5981699

INFORMATION:

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      allgnment_scores:
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Ratio: 5.000
Percent Similarity: 100.000
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                                                                                                                                                                                                                                                                                                                                Align seg 1/1 to: US-08-247-904B-11 from: 1
                                                                                                                                                        Patent No.
                                                                                                                                                        Sequence 22, Application US/08767942A Patent No. 6068982
                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: (617) 832-7000
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
                                                                               APPLICANT: Rolfe, Mark
APPLICANT: Chiu, M. Isabel
APPLICANT: Berlin, Vivian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: MIV-029.01 TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOETWARE: ASCII(text)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
                                   APPLICANT:
                                                    APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Rolfe, Mark
APPLICANT: Eckstein, Jens W.
APPLICANT: Draetta, Giullio
TITLE OF INVENTION: Human Ubiquitin Conjugating Enzyme
NUMBER OF SEQUENCES: 17
 NUMBER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                         COUNTRY: US
ZIP: 02109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Vincent, Matthew P. REGISTRATION NUMBER: 36,709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/08/247,904B FILING DATE: 23-MAY-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE:
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INVENTION: F SEQUENCES:
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One Post Office Square
                              Damagnez, Veronique
Draetta, Giulio
Guillaume, Cottarel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (617)
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   UBIQUITIN CONJUGATING ENZYMES 45
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Gaps: 0
Percent Identity: 100.000
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                                                                                                                                                                                                                                        Patent No. 5833975

GENERAL INFORMATION:
APPLICANT: Paoletti, Enzo
APPLICANT: Tartaglia, James
APPLICANT: Cox, William I.
TITLE OF INVENTION: RECOMBINANT VIRUS IMMUNOTHERAPY
NUMBER OF SEQUENCES: 217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Quality: 55.00
Ratio: 5.000
Percent Similarity: 100.000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Align seg 1/1 to: US-08-767-942A-22 from: 1
                                                                                                                                                                                                                                                                                                                                                                                          Sequence 215,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/767,942A
FILING DATE: 17-DEC-1996
ATTORNEY/AGENT INFORMATION:
NAME: Vincent, Matther:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: 617-832-7000 INFORMATION FOR SEQ ID NO:
                                                                           COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
CURRENT APPLICATION DATA:
                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: Curtis, Morris & Safford
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
LENGTH: 1181 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REGISTRATION NUMBER: 36,709
REFERENCE/DOCKET NUMBER: MIV-029.04
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-832-1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          73 CTACTTCCTGAAAACAACGTTCTGTCCCCCTTG 105
                                                                                                                                                              STREET: 550 L
                                MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 LeuLeuProGluAsnAsnValLeuSerProLeu 11
                                                                                                                 COUNTRY: US
ZIP: 10036
                                                                                                                                                        STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: CDS
LOCATION: 1..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: Vincent, Matthew P. REGISTRATION NUMBER: 36,7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: USA
ZIP: 02109-2170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET: One I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRANDEDNESS: both TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE:
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                                                                                                                                                                                                                                                                                                                                                                      15, Application US/08184009
5833975
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                                                                                                                                                                                             530 Fifth Avenue
                                                                                                                                  USA
                  PatentIn Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HOAG & ELIOT LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps: 0
Percent Identity: 100.000
                  Version #1.25
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alignment_block: US-08-860-232-1 \times US-08-184-009-215
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              alignment_scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; MOLECULE TYPE: US-08-184-009-215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Quality: 55.00
Ratio: 5.000
Percent Similarity: 100.000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: (212) 840-0712
TELEX: 425066CURTMS
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             _documentation_block:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tent No.
                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/402,601
FILING DATE: 09-MAR-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/337,164
                   FILING DATE: 09-NOV-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 1182 base pair
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: DAHLBERG, JAMES E. APPLICANT: LYAMICHEV, VICTOR I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 LeuLeuProGluAsnAsnValLeuSerProLeu 11
                                                                                                                                                                   FILING DATE:
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                         CITY: SAN FRANCISCO
STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                  STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: FILING DATE: 19-JA
                                                                                                                                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTACTTCCTGAAAACAACGTTCTGTCCCCCTTG 105
                                                                                                                                                                                                                                                                                                                                          94104
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Application US/08484956
                                                                                                                                                                                                                                                                                                                                                                                                              E: HAVERSTOCK, MEDLEN & CARROLL 220 MONTGOMERY STREET, SUITE 2200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HEISLER, LAURA
VENTION: DETECTION OF p53 MUTATIONS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BROW, MARY ANN D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (212) 840-3333
(212) 840-0712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OLDENBURG,
                                                                                                                                                                                                                                                                                                                                                         UNITED STATES OF AMERICA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19-JAN-1994
UMBER: US 08/254,359
06-JUN-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CDNA
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                                                                                                                                                                                                        US/08/484,956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MARY C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US/08/184,009
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Identity: 100.000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              from: 1
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alignment_block:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   seq_name: /cgn2_6/ptodata/1/ina/5C_COMB.seq:US-08-484-956-93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             alignment_scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             seq_documentation_block:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Align seg 1/1 to: US-08-484-956-92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-860-232-1 x US-08-484-956-92
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 93,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: (415) 397-83: INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
LENGTH: 1182 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: FO TELECOMMUNICATION INFORMATION: TELEPHONE: (415) 705-8410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 07/986,330 FILING DATE: 07-DEC-1992 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 0: FILING DATE: 04-JUN-1993 PRIOR APPLICATION DATA:
                PRIOR APPLICATION DATA:
APPLICATION WIMBER: US 08/402,601
FILING DATE: 09-MAR-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/337,164
FILING DATE: 09-NOV-1994
                                                                                                                                                                                          CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          73 CTACTTCCTGAAAACAACGTTCTGTCCCCCTTG 105
                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: HAVERSTOCK, MEDLEN & CARROLL STREET: 220 MONTGOMERY STREET, SUITE 2200 CITY: SAN FRANCISCO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 LeuLeuProGluAsnAsnValLeuSerProLeu 11
                                                                                                                                                                                                                              COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEPHONE:
                                                                                                                                 CLASSIFICATION:
                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                              SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY:
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                                                                                                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                                                                       MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                             COUNTRY: UNITED STATES OF AMERICA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Quality:
                                                                                                                                                                                                                                                                                                             94104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5843654
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ratio:
                                                                                                                                                                                                                                                                                                                                                  CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Application US/08484956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LYAMICHEV, VICTOR I.
BROW, MARY ANN D.
OLDENBURG, MARY C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HEISLER, LAURA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DAHLBERG, JAMES E
                                                                                                                                                                                                        PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA (genomic)
                                                                                                                                                                                                                                                                   Floppy disk
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5.000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DETECTION OF p53 MUTATIONS
                                                                                                                                                                                                                                                                                                                                                                                                                                                 114
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                                                                                                                                                                        US/08/484,956
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PRIOR APPLICATION DATA:

APPLICATION NUMBER:

US 08/073,384

APPLICATION NUMBER: US 08/254,359 FILING DATE: 06-JUN-1994

FILING DATE: 04-JUN-1993

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allgnment_block:
US-08-860-232-1 x US-08-484-956-93
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   Sequence 94, Application US/08484956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       alignment_scores:
Quality:
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; MOLECULE TYPE: DNA (genomic)
US-08-484-956-93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ratio: 5.000
Percent Similarity: 100.000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: (415) 397-8338 INFORMATION FOR SEQ ID NO: 93:
                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/402,601
FILING DATE: 09-MAR-1995
                   PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: LYAMICHEV, VICTOR I.
APPLICANT: BROW, MARY ANN D.
APPLICANT: OLDENBURG, MARY C.
APPLICANT: HEISLER, LAURA
TITLE OF INVENTION: DETECTION OF p53 MUTATIONS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 1182 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: FO TELECOMMUNICATION INFORMATION: TELEPHONE: (415) 705-8410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 07-DEC-1992
ATTORNEY/AGENT INFORMATION:
NAME: CARRPOLL ), PETER G.
REGISTRATION NUMBER: 32.837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: DAHLBERG, JAMES E.
                                                                                                                                                                                                                                                                                                       STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
                                                                                                 CLASSIFICATION: 435
                                                                                                                     FILING DATE:
                                                                                                                                     APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                       COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRANDEDNESS:
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                                                                                                                                                                                                                                                                          94104
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US 08/337,164
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                                                                                                                                     US/08/484,956
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alignment_block:
US-08-860-232-1 x US-08-484-956-94
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         seq_name: /cgn2_6/ptodata/1/ina/5C_COMB.seq:US-08-757-653-92
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Ratio: 5.000
Percent Similarity: 100.000
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               CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Ingolia, Diane E.
REGISTRATION NUMBER: 40,027
                                                                                                                                           SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: Medlen & Carroll, LLP
STREET: 220 Montgomery Street, Suite 2200
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TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Kaiser, Michael W. APPLICANT: Lyamichev, Victor I. APPLICANT: Lyamichev, Natasha
                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: Cleavage Of Nucleic Acid Using THE OF INVENTION: Thermostable FEN-1 Endonucleases
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ATTORNEY/AGENT INFORMATION:
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PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    73 CTACTTCCTGAAAACAACGTTCTGTCCCCCTTG 105
                                                                                                                                                                                                                                                                                                                              STREET: 220 Montgome
CITY: San Francisco
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                                                                                                      APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                     COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                           COUNTRY:
                                                                                                                                                                                                                                                                                                                 STATE: California
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STRANDEDNESS: double
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 08/073,384 FILING DATE: 04-JUN-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 0 FILING DATE: 06-JUN-1994
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                                                                                                                                                                                                                                                                            94104
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FORS-02565
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TELECOMMUNICATION INFORMATION: TELEPHONE: (415) 705-8410

TELEPHONE:

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; TOPOLOGY: li
; MOLECULE TYPE:
US-08-757-653-93
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; MOLECULE TYPE:
US-08-757-653-92
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Ratio: 5.000
Percent Similarity: 100.000
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                                                                                                  TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 9
SEQUENCE CHARACTERISTICS:
LENGTH: 1182 base pairs
                                                                                                                                                                                  CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: INGOLIA, Diane E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: FORS
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/757,653
                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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LENGTH: 1182 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Lyamichev, Natasha
TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
TITLE OF INVENTION: Thermostable FEN-1 Endonucleas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Kaiser, Michael W. APPLICANT: Lyamichev, Victor I. APPLICANT: Lyamichev, Natasha
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 73 CTACTTCCTGAAAACAACGTTCTGTCCCCCTTG 105
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                                                          STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                        FILING DATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: San Francisco
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                                                                              nucleic acid
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                     DNA (genomic)
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                                                          double
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                                                                                                                                               93:
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Gaps: 0
Percent Identity: 100.000
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alignment_scores

seq_name: /cgn2_6/ptodata/1/ina/5D_COMB.seq:US-08-458-356-215

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seq_documentation_block:
; Sequence 94, Application US/08757653
; Patent No. 5843669
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    Quality:
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                                                                                                                              alignment_block:
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Ratio: 5.000
Percent Similarity: 100.000
                                                                        Align seg 1/1 to: US-08-757-653-94
                                                                                                               US-08-860-232-1 x US-08-757-653-94
                                                                                                                                                                 Quality: 55.00
Ratio: 5.000
Percent Similarity: 100.000
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GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 94:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE/DOCKET NUMBER: FO TELECOMMUNICATION INFORMATION: TELEPHONE: (415) 705-8410
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NAME: Ingolia, Diane E.
REGISTRATION NUMBER: 40,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION DATA:
APPLICATION NUMBER: US
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MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Kaiser, Michael W.
73 CTACTTCCTGAAAACAACGTTCTGTCCCCCTTG 105
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CTTY: San Francisco
                                      1 LeuLeuProGluAsnAsnValLeuSerProLeu 11
                                                                                                                                                                                                                                                                                                                                  TYPE: nucleion STRANDEDNESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                     TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 1182 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: 435
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                                                                                                                                                                                                                                                                                                                                    nucleic acid
DEDNESS: double
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Lyamichev, Natasha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PatentIn Release #1.0, Version #1.30
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                                                                                                                                                                 Length:
Gaps:
Percent Identity:
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seq_documentation_block:

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alignment_block:
US-08-860-232-1 x US-08-458-356-215
                                                                                                                                                                                                                                 seq_name: /cgn2_6/ptodata/1/ina/5A_COMB.seq:US-08-347-792-20
                                                                                                                                                                                         seq_documentation_block:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-458-356-215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Quality: 55.00
Ratio: 5.000
Percent Similarity: 100.000
                                                                                                                                                                                                                                                                                                                                                             Align seg 1/1 to: US-08-458-356-215 from: 1 to:
                                                                                                                                                Sequence 20, Application US/08347792 Patent No. 5573925
                                                GENERAL INFORMATION:
APPLICANT: Halazonetis, Thanos D.
TITLE OF INVENTION: P53 Proteins With Altered
TITLE OF INVENTION: Tetramerization Domains
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: (212) 840-0712
TELEX: 425066CURTMS
INFORMATION FOR SEQ ID NO: 215:
SEQUENCE CHARACTERISTICS:
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                   NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEPHONE: (212) 840-3333
TELEFAX: (212) 840-0712
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APPLICATION NUMBER: US 08/184,009

FILING DATE: 19-JAN-1994

ATTORNEY/AGENT INFORMATION:

NAME: Frommer, William S.

REGISTRATION NUMBER: 25,506

REFERENCE/DOCKET NUMBER: 454310-2530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: 11
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CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES: 1
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APPLICANT: Tartaglia, Jam
APPLICANT: Cox, William I
                                                                                                                                                                                                                                                                            73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FITLE OF INVENTION: RECOMBINANT VIRUS IMMUNOTHERAPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC COMPULIATE
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/08/458,356 FILING DATE: 02-JUN-1995 CLASSIFICATION: 424
    ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRANDEDNESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET:
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                                                                                                                                                                                                                                                                          CTACTTCCTGAAAACAACGTTCTGTCCCCCTTG 105
                                                                                                                                                                                                                                                                                                LeuLeuProGluAsnAsnValLeuSerProLeu 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      215, Application US/08458356
o. 5942235
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IBM PC compatible
Howson and Howson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            single
                                           Tetramerization Domains 37
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Identity: 100.000
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alignment_block:
US-08-860-232-1 x US-08-347-792-20
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                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20, Application US/08431357
Patent No. 5721340
GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                     PC-DOS/MS-DOS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/431 755
FILING DATE:
CLASSIETT
                                                                                                                                                                                         COMPUTER READABLE FORM:
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REFERENCE/DOCKET NUMBER: WS'
TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-540-9206
TELEPAX: 215-540-5818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION DATA: APPLICATION NUMBER: US,
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 1
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                                                                                                                                                                                                                                                                                                                                            APPLICANT: Halazonetis, Thanos D.
TITLE OF INVENTION: p53 Proteins With Altered
TITLE OF INVENTION: Tetramerization Domains
NUMBER OF SEQUENCES: 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION: NAME: Bak, Mary E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
                                                                                                                            MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                          ADDRESSEE: Howson and Howson
STREET: Spring House Corporate Cntr., PO Box 457
CITY: Spring House
STATE: Pennsylvania
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 LeuLeuProGluAsnAsnValLeuSerProLeu 11
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STATE: Pennan
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                                                                                                                                                                                                                              COUNTRY:
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TYPE: nucleic acid
STRANDEDNESS: double
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 US 08/347,792
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FILING DATE: 28-NOV-1994 ATTORNEY/AGENT INFORMATION:

Bak, Mary E

REGISTRATION NUMBER: 31, REFERENCE/DOCKET NUMBER:

31,215

WST58USA

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alignment_block:
US-08-860-232-1 x US-08-431-357-20
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   Sequence 20, Application PC/TUS9515353
   GENERAL INFORMATION:
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MOLECULE TYPE:
US-08-431-357-20
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                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/347,792
FILING DATE: 28-NOV-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/431,357
FILING DATE: 28-APR-1995
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: 215-540-5818 INFORMATION FOR SEQ ID NO: 20:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
LENGTH: 1215 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION: TELEPHONE: 215-540-9206
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100 CTACTTCCTGAAAACAACGTTCTGTCCCCCTTG 132
                                                         ATTORNEY/AGENT INFORMATION:
NAME: Bak, Mary E.
                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Halazonetis, Thanos D.
TITLE OF INVENTION: p53 Proteins With Altered
TITLE OF INVENTION: Tetramerization Domains
NUMBER OF SEQUENCES: 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: The Wistar Institute of Anatomy APPLICANT: and Biology APPLICANT: Halazonetis, Thanos D.
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TELECOMMUNICATION INFORMATION:
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                                                                                                       APPLICATION NUMBER: US 08/456,623 FILING DATE: 01-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0
                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: USA
ZIP: 19477
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         REFERENCE/DOCKET NUMBER: WS:
                                       NAME: Bak, Mary E. REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                            CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pennsylvania
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                    WST58CPCT
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alignment_block:
US-08-860-232-1 x PCT-US95-15353-20
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Quality:
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TELEPAX: 215-540-818
INFORMATION FOR SEQ ID NO: 3
SEQUENCE CHARACTERISTICS:
LENGTH: 1215 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 13, Patent No. 5
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                 TELEFAX: 202-508-9299 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07
FILING DATE: 17-AUG-1992
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                   TELECOMMUNICATION INFORMATION: TELEPHONE: 202-508-9100
                                                                                                                                           APPLICATION NUMBER: US 07/330,566 FILING DATE: 29-MAR-1989 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                APPLICATION NUMBER: US 07/446,584 FILING DATE: 06-DEC-1989 PRIOR APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Fearon, Eric R.
APPLICANT: Nigro, Janice M.
TITLE OF INVENTION: Detecti
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: 11
MOLECULE TYPE:
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CORRESPONDENCE ADDRESS:
SEQUENCE CHARACTERISTICS:
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                                                                                        NAME: Kagan, Sarah A. REGISTRATION NUMBER: 32 REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET:
                                                 TELEPHONE:
                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/08/047,041A FILING DATE: 22-MAR-1993
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                                 202-508-9299
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LENGTH: 1303 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: cDNA
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
POSITION IN GENOME:
MAP POSITION: 17p13.1
PUBLICATION INFORMATION:
JOURNAL: Mol. Cell. Biol
VOLUME: 6
ISSUE: 12
PAGES: 4650-4656
DATE: 1986
                                  alignment_block:
US-08-860-232-1 x US-08-047-041A-13
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Quality: 55.00
Ratio: 5.000
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gb_est36:C70820
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gb_est19:AW030386
gb_est19:AW030009
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gb_gss13:AQ887186
gb_est7:AA898573
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gb_gss1:AQ056407
gb_est33:BE138282
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gb_est38:R44262
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Database length: -1203564053
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Database: EST:
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-O=/cgn2_1/USPTO_spool/US08860232/runat_11122000_154522_20724/app_query.fasta_1.
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-MINMATCH=0.100 -LOOPCL=0.000 -LOOPEXT=0.000 -GAPOP=4.500
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-FGAPEXT=7.000 -YGAPOP=10.000 -YGAPEXT=0.500 -DELOP=6.000
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-DELEXT=7.000 -START=1 -MATRIX=DJOSUM62 -TRANS=human40.cdi
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-ALIGN=15 -MODE=LOCAL -OUTFMT=pfs -NORM=ext -MINLEN=0
-MAXLEN=200000000 -USER=US08860232_eCGN1_1_1780 -NCPU=6
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125.38
137.36
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152.59
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AA171861 zp22c06.T3 Stratagene
AQ887186 HS_5551_B2_E06_T7A RPC
AA898573 NCP2B7T3 Perithecial N
A1894873 EST7564316 tomato callu
AW030036 EST773641 tomato callu
AW030036 EST773641 tomato callu
AW030036 EST7733641 tomato callu
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AW030036 EST773641 tomato
AW03004 EST787582 MAGE reseque
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BE138282 ug50906 y1 Barstead M
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                               DEFINITION
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ORIGIN
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SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                   alignment_block:
US-08-860-232-1 x AW407968
                                  seq_documentation_block:
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LOCUS AW407968
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Ratio: 5.000
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                                                                                                                    136
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                                                                                                                                        1 LeuLeuProGluAsnAsnValLeuSerProLeu 11
                                                                                                                    CTACTTCCTGAAAACAACGTTCTGTCCCCCTTG 168
                                                                                   gb_est2:AA171861
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 zp22c06.rl Stratagene clone IMAGE:610186 5'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Email: Robert_Strausberg@nih.gov

Eco RI site shown at the beginning of the sequence.

Tissue Procurement: Louis M. Staudt, M.D., Ph.D.

cDNA Library Preparation: M.B. Soares Lab

cDNA Library Arrayed by: M.B. Soares lab

DNA Sequencing by: M.B. Soares Lab

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

www-bio.llnl.gov/bbrp/image/image.html

Seq primer: M13 Forward.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Contact: Robert Strausberg, Ph.D. Tel: (301) 496-1550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                National Institutes of Health, Mammalian Gene Collection (MGC) Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
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/note="Vector: pT7T3-Pac; Site_1: NotI; Site_2: Eco RI;
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(2.5-3.5kb). Directionally cloned. Cells provided by Louis
M. Staudt, Ph.D. Library preparation by Maria de Fatima
Bonaldo, Ph.D. and M. Bento Soares, Ph.D."
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 23-DEC-1996
) Homo sapiens cD
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BASE COUNT
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VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                      seq_documentation_block:
LOCUS AQ887186 GSA 10-NOV-1999
DEFINITION HS_5551_B2_E06_T7A RPCI-11 Human Male BAC Library Homo sapiens
genomic clone Plate=9319 Col-12 Row-J, DNA sequence.
ACCESSION AQ887186
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US-08-860-232-1 x AA171861
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Ratio: 5.000
Percent Similarity: 100.000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hillier, L., Lennon, G., Becker, M., Bonaldo, M.F., Chiapelli, B., Chiasoe, S., Dietrich, N., Dubuque, T., Favello, A., Gish, W., Hawkins, M., Hultman, M., Kucaba, T., Lacy, M., Le, N., Le, N., Mardis, E., Moore, B., Morris, M., Parsons, J., Prange, C., Rifkin, L., Rohlfing, T., Schellenberg, K., Soares, M.B., Tan, F., Thierry-Meg, J., Trevaskis, E., Underwood, K., Wohldmann, P., Waterston, R., Wilson, R. and Marra, M. Generation and analysis of 280,000 human expressed sequence tags 97044478
Homo sapiens
Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: est@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
Seq primer: -28M13 rev2 from Amersham.
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                                                                                                                                                                                                     AQ887186.1 GI:6343376
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Fax: 314 286 1810
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /Clone_lib="Stratagene neuroepithelium (#937231)"
/Clone_lib="Stratagene neuroepithelial cells"
/dev_stage="Watera-2/RA neuroepithelial cells"
/dev_stage="Watera-2/RA neuroepithelial cells"
/lab_host="SOLR (kanamycin resistant)"
/lab_host="SOLR (kanamycin resistant)"
/note="Vector: pBluescript SK: Site_1: EcoRI; Site_2:
/note="Vector: pBluescript SK: Site_1: EcoRI; Site_2:
/note="Vector: pBluescript SK: Site_1: CoRI; Site_2:
/note="Vector: pBluescript SK: Site_1: EcoRI; Site_2: EcoRI;
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/db_xref="GDB:4625445"
/db_xref="taxon:9606"
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Gaps: 0
Percent Identity: 100.000
Chordata;
Primates;
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0
Craniata; Ve
Catarrhini;
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Vertebrata; Euteleostomi; i; Hominidae; Homo.
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REFERENCE
AUTHORS
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ORGANISM
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US-08-860-232-1 x AQ887186
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LOCUS AA898573
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                                                                                                                                                                                                                           VERSION
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                                                                                                                                                                                                                                                                                                                                                                              seq_name: gb_est7:AA898573
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Ratio: 4.600
Percent Similarity: 100.000
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MEDLINE
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Nelson,M.A., Kang,S., Braun,E.L., Crawford,M.E., Dolan,P.L., Leonard,P.M., Mitchell,J., Armijo,A.M., Bean,L., Blueyes,E., Cushing,T., Errett,A., Fleharty,M., Gorman,M., Judson,K., Miller,R., Ortega,J., Pavlova,I., Perea,J., Todisco,S., Trujillo,R.,
                                                                                                                                                                                                                                                                                   NCP2B7T3 Perithecial
                                                                                                                    Neurospora crassa
Eukaryota; Fungi; Ascomycota; Sordariales; Sordariaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Clones are derived from the human BAC library RPCI-11. For BAC library availability, please contact Pieter de Jong (pieter@dejong.med.buffalo.edu). Clones may be purchased from BACPAC Resources (http://bacpac.med.buffalo.edu/ordering_bac.htm. or from Resear h Genetics (info@resgen.com). BAC end Web Server: http://www.htsc.washington.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 High Throughput Sequencing Center University of Washington 401 Queen Anne Avenue North, Seattle, WA 98109, Tel: (206) 616-3618
Fax: (206) 616-3887
Email: jwallace@u.washington.edu
                                                                                                                                                                                                                                                                     mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               High quality sequence stop: 694
Location/Qualifiers
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                                                                                                                                                                                Neurospora crassa.
                                                                                                                                                                                                                             AA898573.1 GI:3045006
                                                                                                                                                                                                                                                   AA898573
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Class: BAC ends
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                                                                                           (bases 1 to 599)
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164 c 137 g 189 t 27 others
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/clone_lib="RPCI-11 Human
/sex="male"
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/db_xref="taxon:9606"
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Percent Identity:
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LOCUS AI894873
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                                                        1 (bases 1 to 551)
Alcala,J., Vrebalov,J., White,R., Matern,A.L., Vision,T., Holt,I., Ling,F., Upton,J., Craven,M.B., Bowman,C.L., Ahn,S., Ronning,C.M., Fraser,C.M., Martin,G.B., Tanksley,S.D. and Giovannoni,J. Generation of ESTs from tomato callus tissue Unpublished (1999)
Contact: David Frisch
                                                                                                                                                                                                                                                                                                                                                   EST264316 tomato callus, cLEC6K7, mRNA sequence. AI894873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Castetter Hall, Al
Tel: 505 277 3411
Fax: 505 277 0304
                   Clemson University Genomics Institute Clemson University
                                                                                                                                                                                                      Lycopersicon esculentum
Lycopersicon esculentum
Eukaryota; Viridiplantae; Embryophyta; Tracheophyta; Spermatophyta;
Magnoliophyta; eudicotyledons; core eudicots; Asteridae; euasterids
I; Solanales; Solanaceae; Solanum; Lycopersicon.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Email: ngp@biology.unm.edu
Deposited in GSDB at the National Center for Genome Resources with accession GSDB:S:1147504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Department of Biology
University of New Mexico
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Contact: Natvig, D.O./Nelson, M.A.
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,D.O.
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4.500
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/tissue_type="Perithecia (fruiting bodies)"
/dev_stage="perithecia"
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/clone="NP2B7"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Albuquerque,
Clemson, SC 29634, USA
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                                                                                                                                                                                                                     Clemson University
100 Jordan Hall, C
                                                                                                                                                                                                                                                                                  Unpublished (1999)
Contact: David Frisch
                                                                                                                                                                                                                                                                                                                      Alcala,J., Vrebalov,J., White,R., Matern,A.L., Vision,T., Holt, Liang,F., Upton,J., Craven,M.B., Bowman,C.L., Ahn,S., Ronning,C.M., Fraser,C.M., Wartin,G.B., Tanksley,S.D. and Giovannoni,J.Generation of ESTs from tomato callus tissue
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Fax: 864 656 4293
Email: dfrisch@CLEMSON.EDU
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Fax: 864 656 4293
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/tissue_type="callus"
/dev_stage="25-40 days old"
/lab_host="XL1-Blue MRF'"
                  /db_xref="taxon:4081"
/clone="cLEC20I12"
                                                          /organism="Lycopersicon
/cultivar="TA496"
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/clone="cLEC6K7"
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/cultivar="TA496"
/clone_lib="tomato callus, TAMU"
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1 (bases 1 to 574)
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Fax: 864 656 4293
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Contact: David Frisch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alcala, J., Vrebalov, J., White, R., Matern, A.L., Vision, T., Holt, I., Llang, F., Upton, J., Craven, M.B., Bowman, C.L., Ahn, S., Ronning, C.M., Fraser, C.M., Martin, G.B., Tanksley, S.D. and Giovannoni, J. Generation of ESTs from tomato callus tissue
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/lab_host="XL1-Blue MRF'"
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/dev_stage="25-40 days old"
/lab_host="XL1-Blue MRF'"
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/tissue_type="callus"
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/clone="cLEC11J16"
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/cultivar="TA496"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 LeuLeuProGluAsnAsnValLeuSerProLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Strongylocentrotus purpuratus.
Strongylocentrotus purpuratus.
Eukaryota, Metazoa; Echinodermata; Eleutherozoa; Echinozoa;
Echinoidea; Euechinoidea; Echinoacea; Echinoida;
Strongylocentrotidae; Strongylocentrotus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GSS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AZ185470 DNA GSS 08-JUN-2000 SP_1005_B1_A06_SP6E Strongylocentrotus purpuratus, purple sea urchin, sperm genomic BAC library Strongylocentrotus purpuratus genomic clone Plate=1005 Col=11 Row=B, DNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unpublished (2000)
Contact: Cameron, RA, Davidson, EH,
Division of Biology 156-29
California Institute of Technology
Pasadena California 91125, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cameron,R.A., Mahairas,G., Rast,J.P., Martinez,P., Biondi,T.R., Swartzell,S., Wallace,J.C., Poustka,A.J., Livingston,B.T., Wray,G.A., Ettensohn,C.A., Lehrach,H., Britten,R.J, Davidson,E.H. and
                                                                                                                                 Quality:
                                                                                                                                                                                                                                                                                                                                                                                                 High quality sequence stop: 736.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                         Seq primer: SP6
Class: BAC ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Email: acameron@caltech.edu
Plate: 1005 row: B column:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tel: (626) 395-8421
Fax: (626) 793-3047
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 6
                                                                                                                                                                                                                                  224
 reverse of: AZ185470
                                                                                                                                                                                                                                                /note="Organ: Sperm; Vector: BACe3.6; BAC Clones in E-Coli
                                                                                                                                                                                                                                                                                                     /organism="Strongylocentrotus purpuratus"
/db_xref="taxon:7668"
/clone="plate=1005 Col=11 Row=B"
/clone_lib="Strongylocentrotus purpuratus, purple sea
                                                                                            44.00
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Percent Identity:
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alignment_block:
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LOCUS R44262
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                                                                              US-08-860-232-1 x R44262
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1 LeuLeuProGluAsnAsnValLeuSerPro 10
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Ratio:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             On May 9, 1995 this sequence version replaced gi:802986. Contact: Wilson RK
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hillier,L., 'Clark,N., Dubuque,T., Elliston,K., Hawkins,M., Holman,M., Kucaba,T., Le,M., Lennon,G., 'Marra,M., Parsons,J., Rifkin,L., Rohlfing,T., Soares,M., Tan,F., Trevaskis,E., Waterston,R., Williamson,A., Wohldmann,P. and Wilson,R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      yg35e08.sl Soares infant brain
IMAGE:34286 3', mRNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unpublished (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 (bases 1 to 296)
Hillier, L., Clark, N.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R44262
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Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Email: est@watson.wustl.edu
Insert Size: 813
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                                                                                                                              43.00
4.778
90.000
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/db_xref="GDB:406633"
/db_xref="taxon:9606"
/clone="IMAGE:34286"
                                                                                                                                                                                                                                                                                                                                                                                                                                      /clone_lib="Soares infant brain lNIB"
                                                                                                                                                                                                                                                                                                                                                                                                       /dev_stage="73 days post natal"
                                                                                                                                                                                                                                                                                                                                                                                                                          /sex="female"
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LOCUS AO056407
                                                                                                              seq_name: gb_gss1:AQ056407
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US-08-860-232-1 x AA687270
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               sequence.
                                                 AQ056407 456 bp DNA CIT-HSP-2342L24.TF CIT-HSP Homo sapiens
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Unpublished (1997)
Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AA687270 421 bp mrNA EST 24-DEC-1997 nv59f06.sl NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1234115 3'ssimilar to contains Alu repetitive element; mRNA sequence.
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AQ056407.1 GI:3353013
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tel:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap
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                                                                                                                                                                                                                                                                                                                                                                                                                           145
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                                                                                                                                                                                                                    AA687270
                                                                                                                                                                                                                                                                                                                                                                                                                      and Eco RI sites of the modified pT7T3 vector. Library went through one round of normalization, and was constructed by Bento Soares and M. Fatima Bonaldo." 82 c 77 g 117 t
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4.200
90.909
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/lab_host="DH10B"
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/clone_lib="NCI_CGAP_GCB1"
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wd. ET from Amersham
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AUTHORS
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Marra, M., Hillier, L., Kucaba, T., Martin, J., Beck, C., Wylie, T., Underwood, K., Steptoe, M., Theising, B., Allen, M., Bowers, Y., Person, B., Swaller, T., Gibbons, M., Pape, D., Harvey, N., Schurk, R., Ritter, E., Kohn, S., Shin, T., Jackson, Y., Cardenas, M., McCann, R., Waterston, R. and Wilson, R.
                                                                                                                                                                                                                                                                                               sequence.
BE138282
                                                                                                                                                                                                                                                                                                                               BE138282 467 bp mrNA EST 21-JUN-2000 ug50g06.yl Barstead bowel MPLRB9 Mus musculus cDNA clone IMAGE:1545850 5' similar to TR:Q9ZZB4 Q9ZZB4 SMALL ESPIN. ;, mRNA
                                                                                                                                                                                                            Mus musculus
                                                                                                                                                                                                                                                                           BE138282.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: mdadams@tigr.org
Clones are available from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Contact: Mark Adams
Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Dr., Rockville, MD 20850, USA
Tel: 301 838 0200
Fax: 301 838 0208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Simon, M. and Venter, J.C.
Use of a random BAC End Sequence Database
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                                                                                                                                                                                                                                     house mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      http://www.tigr.org/tdb/humgen/bac_end_search/bac_end_search.html.seq primer: M13-21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unpublished (1998)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="2342L24"
/clone_lib="CIT-HSP"
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4.200
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /cell_type="Sperm"
/note="Vector: pBeloBACll; Site_1: HindIII; Site_2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /sex="Male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   page:
                                                                                                                                                                                                                                                                           GI:8600782
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Gaps:
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SOURCE
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Quality:
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Ratio: 4.200
Percent Similarity: 100.000
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                                                                TITLE
                                          JOURNAL
                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          229 CTGCCTGAGAACACGGTTGTCAGCCCCTTG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 LeuProGluAsnAsnValLeuSerProLeu 11
                                    Marra,M., Hillier,L., Kucaba,T., Martin,J., Beck,C., Wylle,T., Underwood,K., Steptoe,M., Theising,B., B., Allen,M., Bowers,Y., Person,B., Swaller,T., Gibbons,M., Pape,D., Harvey,N., Schurk,R., Ritter,E., Kohn,S., Shin,T., Jackson,Y., Cardenas,M., McCann,R., Waterston,R. and Wilson,R.
The WashU-NCI Mouse EST Project 1999
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                              AI510593 500 bp mRNA EST 15 mg40a07.yl Barstead MPLRB1 Mus musculus cDNA clone I similar to TR:Q63618 Q63618 ESPIN. ;, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unpublished (1999)
Other_ESTs: ug50906.xl
Contact: Marra M/MashU-NCI Mouse EST Project 1999
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
Contact: Marra M/WashU-NCI Mouse EST Project 1999 Washington University School of Medicine
                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus 1 (bases 1 to 500)
                                                                                                                                                                                                                                     Mus musculus
                                                                                                                                                                                                                                                                               EST
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This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
MGI:951198
                                                                                                                                                                                                                                                         house mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Seg primer: -40RP from Gibco.
Location/Qualifiers
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165 c
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/lab_host="DH10B"
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/clone_lib="Barstead bowel MPLRB9"
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/strain="FVB/N"
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Gaps: 0
Percent Identity: 80.000
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                                                                                                                                                                                                                                                                                                                                                                                                                                       seq_name: gb_est1:AA139619
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Ratio: 4.200
Percent Similarity: 100.000
                                                                                                                                       AUTHORS
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                                                                                                                                                                                                                                                                                                                                   AA139619 524 bp mRNA EST 13-FEB-1997 mq40a07.rl Barstead MPLRB1 Mus musculus cDNA clone IMAGE:581172 5's similar to TR:G402513 G402513 SMALL FORKED PROTEIN.;, mRNA
Unpublished (1996)
Contact: Marra M/Mouse EST Project
                                                                         Marra,M., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dubu-
Geisel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M.,
Schellenberg,K., Steptoe,M., Tan,F., Underwood,K., Moore,B.,
Theising,B., Wylie,T., Lennon,G., Soares,B., Wilson,R. and
                                                                                                                                               Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
1 (bases 1 to 524)
                                                                                                                                                                                                                                                                                                  sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Email: mouseest@watson.wustl.edu
This clone is available royalty free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
This read is a RESEQUENCE of a previously sequenced mouse clone
This read has been verified (found to hit its original self in the
correct orientation)
                                      The WashU-HHMI Mouse EST Project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tel: 314 286 1800
Fax: 314 286 1810
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                                                             Waterston, R.
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/db_xref="taxon:10090"
/clone="IMAGE:581172"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /tissue_type="Kidney"
/dev_stage="6 weeks"
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                                                                                                                                    Dubuque, T.,
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KEYWORDS
SOURCE
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US-08-860-232-1 x AA139619/rev
                                                                                 COMMENT
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LOCUS AW975473
                                                                                                                                                                                                                                                                                                                                                                                                                                           seq_name: gb_est25:AW975473
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Ratio: 4.200
Percent Similarity: 100.000
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                                                                                                                                        TITLE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 LeuProGluAsnAsnValLeuSerProLeu
                                                                                                                                                                                                                                                                                                          AW975473 MAGE reseque
AW975473.1 GI:8166687
EST.
Assessment of gene expression patterns in a model of colon tumor metastasis using a 19,200 element cDNA microarray Unpublished (2000)
Contact: John Quackenbush
The Institute for Genomic Research 9712 Medical Center Dr., Rockville, MD 20850, USA Tel: 301 838 3528
Fax: 301 838 0208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WashU-HHMI Mouse EST Project
Washington University School of MedicineP
4444 Forest Park Parkway, Box 8501, St. Lc
Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; 1 (bases 1 to 641)
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This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
                                                                                                                                                                        Hegde, P., Qi, R., Abernathy, K., Dharap, S., Gaspard, R., I.E., Saeed, A.I., Sharov, V., Lee, N.H., Yeatman, T.J.
                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                   EST387582 MAGE resequences,
                                                                                                                                                          Quackenbush,J.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Mus musculus"
/strain="BALB/c"
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/clone="IMAGE:581172"
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/dev_stage="6 weeks"
/lab_host="DH10B"
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                                                                                                                                                                                                                                                     Euteleostomi;
                                                                                                                                                                          , Gay,C., Holt and
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Email: johnq@tigr.org
Plate: 349

Seq primer: Forward.
Location/Qualifiers
1. .61
1. .601
Location/Qualifiers
1. .601
Location/Qualifiers
1. .601
Location/Qualifiers
1. .601
Location/Qualifiers
1. .602
Location/Qualifiers
1. .606
//db_xref="Homo saplens"
//db_xref="Homo
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9b_ro:MUSTCRBCAM

9b_px5:HSA27863

9b_px5:HSA27863

9b_px5:HSA27863

9b_pat:134275

9b_pat:134275

9b_pat:A31919

9b_pat:AR011828

9b_pat:AR050016

9b_pat:AR064964

9b_pat:AR064964

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9b_pat:AR0649680

9b_pat:AR02551

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9b_un: AX001057
9b_pat: A08852
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9b_pat:AR060419
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          AR060419 Sequence 3 from patent I 122233 Sequence 3 from patent US M22883 Human phosphoprotein p53 A58299 Sequence 4 from Patent WC A58300 Sequence 5 from Patent WC A58300 Sequence 8 from Patent A08852 H.sapiens flanking sequence 17 from Patent WC A58300 Sequence 8 from Patent WC A58300 Sequence 9 from Patent WC A58300 Sequence 9 from Patent WC A58300 Sequence 79 from Patent WC A5832467 Sequence 60 from Patent WC A5832467 Mous musculus T cell recomposed for MC A5832467 Sequence 60 from Patent WC A5832467 Sequence 60 from Patent WC A5832467 Sequence 23 from Patent WC A5832467 Sequence 23 from Patent WC A5832467 Sequence 2 from Patent WC A583
169092 Sequence 362 from patent AR022551 Sequence 34 from patent A26680 Oligonucleotide primer nd AR050486 Sequence 36 from patent I44792 Sequence 16 from patent U X70750 M.musculus mRNA for T-cell A56975 Sequence 33 from Patent W E13448 PCR primer for detecting E13871 PCR primer for gaining Tr
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DEFINITION Human cellular
ACCESSION M13113
VERSION M13113.1 GI:1
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gb_pat:I77187
gb_pat:A08054
yb_pat:A13208
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AUTHORS
TITLE
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Quality: 36.00
Ratio: 5.143
Percent Similarity: 100.000
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Unclassified.
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       /gene="TP53"
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                                                                                                                                                                                                                                                                Human: fetal liver DNA, clones lambda-p53-[alpha,pi]; lymphoblastoid cell line MANN DNA (library of S.Carson), clone pcos53PHD; Jurkat T-cell line J6, cDNA to mRNA (library of Kataoka and Collins), clone p53J6K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Vogelstein,B., Baker,S.J., Fearon,E.R. and Nigro,J. Detection of loss of the wild-type P53 gene and kit Patent: US 5527676-A 16 18-JUN-1996;
                                                                                                                                                                                                                                                                                                                                       antigen; phosphoprotein; tumor antigen
3 of 11
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M13113.1 GI:189452
                                                                                                                                                                                                                                                                                                                                                                                                    Human cellular phosphoprotein p53 gene,
                                                                                                                                                  Characterization of the human p53 Mol. Cell. Biol. 6 (5), 1379-1385
                                                                                                                                                                                                     Mammalia; Eutheria; Primates; 1 (bases 1 to 22)
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                                               /organism="Homo sapiens"
/db_xref="taxon:9606"
/map="17p13.1"
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/gene="TP53"
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Sequence 23 from patent US
AR060419
AR060419.1 GI:5986869
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Boeke, J.D. and Brachmann, R.K.
Nucleic acids encoding p53 mutations which suppress
                                                                                                             Unknown
                                                                                                                                  122233.1 GI:1602587
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Buchman, V.L., Chumakov, P.M.,
Georgiev, G.P.
                                                                                                                                                                                                                                                                     14 a 11 c 12 g About 86 bp after segment 2.
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Homo sapiens
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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/gene="p53"
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11 c 12 g
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/db_xref="taxon:9606"
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Ratio: 3.400
Percent Similarity: 100.000
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NICOLAGEWRA, M. I. and DUMAS, M.E.

METHOD FOR THE SPECIFIC COUPLING OF THE CAP OF THE EXTREMITY 5' OF A FRAGMENT MRNA AND PREPARATION OF MRNA AND COMPLETE CDNA PATENT: WO 9634981-A 4 07-NOV-1996;

GENSET (FR)

Other publication FR 2733765 961108

Other publication FR 2733765 961108.
                                                                                                                                                                                                                                                                                                                                                                                                                                    Other publication AU 5982996 961121
Other publication FR 2733765 961108
Other publication FR 2733762 961108
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Nicolaevna,M.I. and Dumas,M.E.
METHOD FOR THE SPECIFIC COUPLING OF THE CAP OF THE EXTREMITY 5'
A FRAGMENT MRNA AND PREPARATION OF MRNA AND COMPLETE CDNA
Patent: WO 9634981-A 5 07-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          unidentified
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                                                                                                                              Quality:
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/db_xref="taxon:32644"
24 c 0 g 1:
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/db_xref="taxon:32644"
24 c 0 g 1:
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1 Patent WO9634981.
                                                       Length: 10
Gaps: 0
Percent Identity: 60.000
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LOCUS A08852
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Ratio: 4.429
Percent Similarity: 100.000
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                                                 Jeffreys, A.J.

Extended nucleotide sequences
Patent: EP 0370719-A 28 30-MAY-1990;
IMPERIAL CHEMICAL INDUSTRIES PLC
LOCATION/Qualifiers
                                                                                                                                                                                                                               AU8852 38 bp DNA
H.sapiens flanking sequences of 33.6.
A08852
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Stempfer,G. and Schoergendorfer,K.
METHOD OF ALTERING THE DOMAINS OF CYCLOSPORIN SYNTHETASE TO GIVE A
MODIFIED CYCLOSPORIN SYNTHETASE
Patent: WO 9902659-A 21-JAN-1999;
STEMPFER GUENTHER (AT); BIOCHEMIE GMBH (AT)
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                                                                                                                                   Homo sapiens
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            /organism="Homo sapiens"
/db_xref="taxon:9606"
6 c 11 g 1
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/db_xref="taxon:32644" #
6 c 11 g
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LOCUS A98784
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US-08-860-232-1 x A08853
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US-08-860-232-1 x A08852/rev
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Extended nucleotide sequences
Patent: EP 0370719-A 29 30-MAY-1990;
IMPERIAL CHEMICAL INDUSTRIES PLC
Location/Qualifiers
                                                                                                                                                                                           Sequence 17 from Patent WO9910358.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         H.sapiens flanking sequences of 33.6, reverse complement. A08853 A08853.1 GI:411775
                                                                           1 (bases 1 to 46)
Hegemann,P.
METHOD FOR PRODUCING NUCLEIC ACID POLYMERS
Patent: WO 9910358-A 04-MAR-1999;
                                                                                                                                                unidentified
                                                                                                                                                          unidentified.
                                                                                                                                                                                 A98784.1 GI:6781805
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                                                                        HEGEMANN PETER (DE)
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/db_xref="taxon:32644"
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/db_xref="taxon:9606"
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LOCUS AR032396
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US-08-860-232-1 x A98784/rev
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                                                                                                                                                                                                                                          18 CCTAATAATAACAGTCTTTGCCCTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3 ProGluAsnAsnValLeuSerProLeu 11
                                                                                                                                                                                                                                                                                                                                                               Quality:
Ratio:
                                               1 (bases 1 to 48)
Edwards,C.A., Cantor,C.R., Andrews,B.M.,
Sequence-directed DNA-binding molecules of
Patent: US 5578444-A 8 26-NOV-1996;
                                                                                                           Unknown
                                                                                                                                                        Sequence 8 from patent US 129136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 (bases 1 to 48)
Edwards,C.A., Cantor,C.R., Andrews,B.M., Turin,L.M. and Fry,K.E.
Method of determining DNA sequence preference of a DNA-binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 8 from AR032396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Quality:
                                                                                              Unclassified.
                                                                                                                      Unknown.
                                                                                                                                              I29136.1 GI:1819927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Patent: US 5869241-A 8 09-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 molecule
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unclassified
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Gaps: 0
Identity: 66.667
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                                                          compositions and methods
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ORIGIN

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seq_documentation_block:
LOCUS AR032467
DEFINITION Sequence 79 fro
ACCESSION AR032467
VERSION AR032467.1 GI
KEYWORDS Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     seq_documentation_block:
LOCUS
LOCUS
DEFINITION sequence 8 fro
ACCESSION 190810
VERSION 190810.1 GI:3
KEYWORDS Unknown.
ORGANISM Unknown.
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    Quality:
    Ratio:
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                                          JOURNAL
FEATURES
                                                                                  REFERENCE
AUTHORS
TITLE
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AUTHORS
TITLE
JOURNAL
FEATURES
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    Quality:
    Ratio:
 BASE COUNT
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US-08-860-232-1 x I90810
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ORIGIN
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                                                                                                                                        ORGANISM
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18 CCTAATAACAGTCTTTGCCCTCTT 44
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Sequence 8 from patent US 5726014.
190810
190810.1 GI:3935280
                                                                                                                                                                                               sequence 79 from patent US 5869241. AR032467
                          Patent: US 5869241-A 79 09-FEB-1999;
Location/Qualifiers
1 49
                                                                          1 (bases 1 to 49)
Edwards,C.A., Cantor,C.R., Andrews,B.M., Turin,L.M. and Fry,K.E.
Method of determining DNA sequence preference of a DNA-binding
                                                                                                                                           Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 (bases 1 to 48)
Edwards,C.A., Cantor,C.R., Andrews,B.M. and Turin,L.M.
Screening assay for the detection of DNA-binding molecules
Patent: US 5726014-A 8 10-MAR-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
Unclassified
                                                                        molecule
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Gaps: 0
Percent Identity: 66.667
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Gaps: 0
Percent Identity: 66.667
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SIDS6/gcgdata/geneseq/geneseqn/NA199 DAT: X39410 SIDS6/gcgdata/geneseq/geneseqn/NA199 DAT: X39410 SIDS6/gcgdata/geneseq/geneseqn/NA199 DAT: X30410 SIDS6/gcgdata/geneseq/geneseqn/NA199 DAT: X30108 SIDS6/gcgdata/geneseq/geneseqn/NA199 DAT: X301652 SIDS6/gcgdata/geneseq/geneseqn/NA199 DAT: X30063 SIDS6/gcgdata/geneseq/geneseqn/NA199 DAT: X30063 SIDS6/gcgdata/geneseq/geneseqn/NA199 DAT: X30063 SIDS6/gcgdata/geneseq/geneseqn/NA199 DAT: X40749 SIDS6/gcgdata/geneseq/geneseqn/NA199 DAT: X40749 SIDS6/gcgdata/geneseq/geneseqn/NA199 DAT: X35817 SIDS6/gcgdata/geneseq/geneseqn/NA199 DAT: X35817 SIDS6/gcgdata/geneseq/geneseqn/NA199 DAT: X35428 SIDS6/gcgdata/geneseq/geneseqn/NA199 DAT: X35428 SIDS6/gcgdata/geneseq/geneseqn/NA199 DAT: X35428 SIDS6/gcgdata/geneseq/geneseqn/NA199 DAT: X3515651 SIDS6/gcgdata/geneseq/geneseqn/NA199 DAT: X3515651 SIDS6/gcgdata/geneseq/geneseqn/NA199 DAT: X351756 SIDS6/gcgdata/geneseq/geneseqn/NA199 DAT: X351756 SIDS6/gcgdata/geneseq/geneseqn/NA199 DAT: X351756 SIDS6/gcgdata/geneseq/geneseqn/NA199 DAT: X351756 SIDS6/gcgdata/geneseq/geneseqn/NA199 DAT: X351797 SIDS6/gcgdata/geneseq/geneseqn/NA199 DAT: X3518 SIDS6/gcgdata/genese
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Query: US-08-860-232-1
Query length: 11
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/SIDS6/gcgdata/geneseq/geneseqn/NA1999.DAT:X19963
/SIDS6/gcgdata/geneseq/geneseqn/NA1999.DAT:X51429
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-(q=/cgn2_1/USPTO_spool)US08860232/runat_11122000_153407_14843/app_query.fasta_1...
-DB=N_Geneseq_36 -QEMT=fastap -SUFFIX=lim60.rng -GAPOP=12.000
-GAPEXT=4.000 -MINMATCH=0.100 -LOOPCL=0.000 -LOOPEXT=0.000
-QGAPOP=4.500 -GCAPEXT=0.050 -XGAPOP=10.000 -XGAPEXT=0.500
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-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR_SCORE=pct
-THR_MAX=100 -THR_MIN=0 -AALIGN=15 -MODE-LOCAL -OUTFMT=pfs
-NORM=ext -MINLEN-0 -AALIGN=15 -MODE-LOCAL -OUTFMT=pfs
-NORM=ext -MINLEN-0 -AALIGN=15 -MODE-LOCAL -OUTFMT=0fs
-NORM=ext -MINLEN-0 -MAXIGN=15 -MODE-LOCAL -OUTFMT=0fs
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seq_name: /SIDS6/gcgdata/geneseq/geneseqn/NA1999.DAT:Z40750
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\( \) SIDS6/gcgdata/geneseq/geneseqn/NA1989.DAT:091674
\( \) SIDS6/gcgdata/geneseq/geneseqn/NA1995.DAT:080186
\( \) SIDS6/gcgdata/geneseq/geneseqn/NA1998.DAT:V04982
                                                        secreted proteins. The extended cDNAs (or genomic DNAs obtainable from CC them) may be used to prepare PCR primers and probes. These are useful for forensic matching or positive identification by DNA sequencing. They may calso be used in alternative fingerprint identification techniques. CC Antibodies against the proteins encoded by the extended cDNAs are useful in identification of tissue types or cell species, as well as identifying tissue specific soluble proteins. The sequences can be used for construction of secretion vectors. Other sequences derived with hereditary construction of secretion vectors. Other sequences derived from the construction of secretion vectors. Other sequences derived from the construction of secretion vectors. Other sequences derived from the construction of secretion vectors. Other sequences derived from the construction of secretion vectors. Other sequences derived from the construction of secretion vectors. Other sequences derived from the construction of secretion vectors. Other sequences derived from the construction of secretion vectors. Other sequences derived from the construction of secretion vectors. Other sequences derived from the construction of secretion vectors. Other sequences derived from the construction of secretion vectors. Other sequences derived from the construction of the proteins may be useful in construction and treating several disorders including, but not limited to: cancer, hyperlipidaemia, cardiovascular and neurodegenerative disorders, but not proteins and the construction of the proteins are constructed by the const
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             autoimmune disease; rheumatic disease; embryogenic disorder; myopathy; renal injury; amino aciduria; hypoglycaemia; male rat infertilitv: hypertension: ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Oligonucleotide -Cap for Secreted protein EST isolation
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 2; Page 12;
                                                                                                                                                                                                                                                                                                                                                                                                                            This sequence represents a PCR primer used within the course of the invention. The invention relates to 70 nucleic acids encoding human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cDNAs useful
antibodies -
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98US-0096116.
98US-0099273.
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                                                myopathies.
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alignment_scores:

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alignment_block:
US-08-860-232-1 x X88171
                                              alignment_scores:
Quality:
Ratio:
                                                                                                         seq_documentation_block:
ID x88171 standard; RN
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US-08-860-232-1 x Z40750
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                                  Percent Similarity:
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13-NOV-1997;
17-DEC-1997;
09-FEB-1998;
13-APR-1998;
10-AUG-1998;
                                                                                                                            This invention describes novel nucleic acid sequences of extended cDNAs (see 897813-897906) which encode human secreted proteins (see Y36129-Y36222) and which have cytostatic, thrombotic and osteopathic activity. The extended cDNAs can be used to express secreted proteins or parts of them or to obtain antibodies capable of binding to the secreted proteins. They may also be used in diagnostic, forensic, gene therapy and chromosome mapping procedures. Wes also include design of expression vectors and secretion vectors. This sequence represents an oligoribonucleotide primer used in the method of the invention.
                                                                                                                                                                                                                                                                                                                                                 (GEST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Secreted protein; human; cytostatic; thrombotic; osteopathic; forensic; diagnostic; gene therapy; chromosome mapping; secretion vector; primer;
                                                                                                        Sequence
                                                                                                                                                                                                                                                     Example
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            13-NOV-1998;
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                                                                                                                                                                                                                                                                          cDNAs encoding secreted proteins
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                                                                                                         ВP;
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98US-0081563.
98US-0096116.
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97US-0069957
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alignment_block:

Percent Similarity:

Quality: Ratio:

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Length: 10
Gaps: 0
Percent Identity: 60.000

Length:

US-08-860-232-1 x X97544

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alignment_scores:
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                                                                               This sequence represents an oligonucleotide used to isolate the extended human secreted protein coding sequences of the invention. The secreted proteins can be used in treating or controlling a variety of human conditions. The secreted proteins may act as cytokines or may affect cellular proliferation or differentiation or may act as immune system regulators, haematopoiesis regulators, tissue growth regulators, regulators of reproductive hormones or cell movement or have chemotactic/chemokinetic, receptor/ligand, anti-inflammatory or tumour inhibition activity. The DNAs can be used in forensic procedures to identify individuals or in diagnostic procedures to identify individuals or in diagnostic procedures to identify individuals or in diagnostic procedures to seconstructing a high resolution map of the human chromosomes. They can
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17-DEC-1997;
09-FEB-1998;
13-APR-1998;
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                                          Sequence 46
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also be used
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                                                                                                                                                                                                                                                                                           Example 2;
                                                                                                                                                                                                                                                                                                                   New isolated human secreted proteins
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                                                                                                                                                                                                                                                                                         Page 12; 516pp; English.
                                           BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                  for gene therapy to control or treat genetic diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                    98US-0096116.
97US-0069957.
98US-0074121.
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                                          U; 0 other;
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seq_documentation_block:
ID X19963 standard; RNA,
XX
AC X19963;
XY
DT 16-JUN-1999 (first of the control of the 
                                                                                                                                                                                                                                                                                        X X40251 to X40397 represent 5' expressed sequence tags (ESTs) for human CC secreted proteins, and encode the proteins given in X11533 to X11679, CC respectively. The proteins given represent the signal peptide and an CC N-terminal fragment of a secreted protein. The nucleic acid sequences CC can be used for producing secreted human gene products. They can also CC obtained may have cytokine activity, cell proliferation/differentiation CC activity, haematopoiesis regulating activity, tissue growth regulating CC activity, reproductive hormone regulating activity, chemotactic/ CC ligand activity, anti-inflammatory activity, tumour inhibition activity or other activity, anti-inflammatory activity, tumour inhibition activity or other activity. The products can be used in forensic, gene therapy CC and chromosome mapping procedures. The sequences can also be used for CC the signal peptide can be used for directing extracellular secretion of a polypeptide or the insertion of a polypeptide into a membrane, or CC importing a polypeptide into a cell. The present sequence represents an coligoribonucleotide used in an example from the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                seq_name: /SIDS6/gcgdata/geneseq/geneseqn/NA1999.DAT:X19963
                  Quality: 34.00
Ratio: 3.400
Percent Similarity: 100.000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Oligoribonucleotide -Cap SEQ ID NO: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              X19963 standard; RNA; 46 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New nucleic acids encoding human secreted proteins - obtained from cDNA libraries derived from liver, lung, large intestine, colon,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1999-153700/13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      thyroid and pancreas tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Page 15; 398pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dumas Milne Edwards J,
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Length: 10
Gaps: 0
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alignment_block:
US-08-860-232-1 x X19963
seq_documentation_block:
ID x51429 standard; RN
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                                                  x51459 to x51691 represent 5' expressed sequence tags (ESTs) for human considerable proteins, and encode the proteins given in Y12681 to Y12913, respectively. The proteins given represent the signal peptide and an N-terminal fragment of a secreted protein. The nucleic acid sequences can be used for producing secreted human gene products. They can also be used to develop products for diagnosis and therapy. The proteins obtained may have cytokine activity, cell proliferation/differentiation activity, naematopoiesis regulating activity, tissue growth regulating activity, reproductive hormone regulating activity, chemotactic/ chemokinetic activity, haemostatic and thromobytic activity, receptor/ ligand activity, anti-inflammatory activity, tumour inhibition activity or other activity, anti-inflammatory activity, tumour inhibition activity and chromosome mapping procedures. The sequences can also be used for obtaining corresponding procedures. The sequences can also be used for the signal peptide can be used for directing extracellular secretion of a polypeptide into a membrane, or importing a polypeptide into a cell. This sequence represents an objective cap, used in the isolation of the 5' EST sequences of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Align seg 1/1 to: X19963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              forensic; gene therapy; chromosome mapping; signal peptide; upstream regulatory sequence; cytokine activity; cell proliferation; differentiation; haematopoiesis regulation; tissue growth regulation; reproductive hormone regulation; chemotactic; chemokinetic; haemostat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Oligonucleotide -Cap.
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                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 2; Page 144; 522pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cDNA libraries derived from testis, ovary, uterus and spleen tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New nucleic acids encoding human secreted proteins - obtained from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1999-153779/13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Duclert A, Dumas Milne Edwards J,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21-JUN-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           thrombolytic; anti-inflammatory; tumour inhibition; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
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alignment_scores

Sequence 46

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seq_documentation_block:
                           CC v11374-v11531. The proteins given represent the signal peptide and an CC N-terminal fragment of a secreted protein. The nucleic acid sequences CC can be used for producing secreted human gene products. They can also be used to develop products for diagnosis and thorapy. The proteins CC obtained may have cytokine activity, cell proliferation/differentiation CC activity, haematopoiesis regulating activity, tissue growth regulating CC chemokinetic activity, haemostatic and thrombolytic activity, receptor/ CC ligand activity, anti-inflammatory activity, tumour inhibition activity or other activities. The products can be used in forensic, gene therapy CC and chromosome mapping procedures. The sequences can also be used for obtaining corresponding promoter sequences. The nucleic acids encoding CC the signal peptide can be used for directing extracellular secretion of a polypeptide or the insertion of a polypeptide into a membrane, or importing a polypeptide into a cell. This sequence represents an colliporibonucleotide which is used in the method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                seq_name: /SIDS6/gcgdata/geneseq/geneseqn/NA1999.DAT:X39410
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                                                                                                                                                                                                                                                                                                                        This invention describes 5' expressed sequence tags (ESTs) represented x39440 to X39597, which encode the human secreted proteins represented
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; secreted protein; EST; expressed sequence tag; diagnosis; forensic; gene therapy; chromosome mapping; signal peptide; upstream regulatory sequence; cytokine activity; cell proliferation; differentiation; haematopoiesis regulation; tissue growth regulation;
                                                                                                                                                                                                                                                                                                                                                                            Example 2; Page 15; 434pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                  and fetal brain tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                 New nucleic acids encoding human secreted - proteins obtained from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-JUL-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Quality:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dumas Milne Edwards J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            anti-inflammatory; tumour inhibition; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein
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3.400
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6
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Gaps:
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seq_documentation_block: ID X40408 standard: PN
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             secreted proteins expressed in prostate, and encode the proteins given in Y11716 to Y1193 respectively. The proteins given represent the signal peptide and an N-terminal fragment of a secreted protein. The nucleic acid sequences can be used for producing secreted human gene products. They can also be used to develop products for diagnosis and therapy. The proteins obtained may have cytokine activity, cell proliferation and differentiation activity, haematopoiesis regulating activity, tissue growth regulating activity, reproductive hormone regulating activity. chemotactic/chemokinetic activity, haemostatic and thrombolytic activity, receptor/ligand activity, anti-inflammatory activity, tumour inhibition activity or other activities. The products can be used in forensic, gene therapy and chromosome mapping procedures. The sequences can also be used for obtaining corresponding promoter sequences. The nucleic acids encoding the signal peptides can be used for directing extracellular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; secreted protein; EST; expressed sequence tag; diagnosis; forensic; gene therapy; chromosome mapping; signal peptide; prostate; upstream regulatory sequence; cytokine activity; cell proliferation; differentiation; haematopoiesis regulation; tissue growth regulation; reproductive hormone regulation; chemotactic; chemokinetic; haemostatic; thrombolytic; anti-inflammatory; tumour inhibition; ss.
                                                                                                                                                                                                                                                                                                                                                                  New isolated prostate-derived nucleic acids - used to develop products which may have cytokine, immune regulatory, haematopoiesis regulating, anti-inflammatory or tumour inhibition activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Duclert A, Dumas Milne Edwards
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Oligoribonucleotide -Cap.
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                                                                                                                                                                                                                                                                                          X40438 to X40715
                                                                                                                                                                                                                                                                                                                                Example 2; Page 15;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CUACUCCCAUCCAAUUCCACCCUAACUCCU
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polypeptide or the insertion of a polypeptide
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100.000
                                                                                                                                                                                                                                                                                  represent 5' expressed sequence tags (ESTs) for human
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                                                                                                                                                                                                                                                                                                                            675pp; English.
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Gaps: 0
Percent Identity: 60.000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   J, Lacroix
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or

importing a

polypeptide into a cell.

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seq_documentation_block:
ID x51757 standard; RN
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US-08-860-232-1 x X40408
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       seq_name: /SIDS6/gcgdata/geneseq/geneseqn/NA1999.DAT:X51757
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Align seg 1/1 to: X40408
       x51787 to x52019 represent 5' expressed sequence tags (ESTs) for human secreted proteins, and encode the proteins given in Y12987 to Y13219, respectively. The proteins given represent the signal peptide and an N-terminal fragment of a secreted protein. The nucleic acid sequences can be used for producing secreted human gene products. They can also be used to develop products for diagnosis and therapy. The proteins obtained may have cytokine activity, cell proliferation/differentiation activity, haematopoiesis regulating activity, tissue growth regulating activity, reproductive hormone regulating activity, chemotactic/ chemokinetic activity, haemostatic and thrombolytic activity, receptor/ ligand activity, anti-inflammatory activity, tumour inhibition activity and chromosome mapping procedures. The sequences can also be used for other activities. The products can be used in forensic, gene therapy and chromosome mapping procedures. The sequences can also be used for other activity arcmofer general research and corresponding procedures.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 forensic; gene therapy; chromosome mapping; signal peptide; upstream regulatory sequence; cytokine activity; cell proliferation; differentiation; haematopoiesis regulation; tissue growth regulation; reproductive hormone regulation; chemotactic; chemokinetic; haemostatic;
obtaining corresponding promoter sequences.
                                                                                                                                                                                                                                                                              Example 2; Page 15; 577pp; English.
                                                                                                                                                                                                                                                                                                                                       New isolated brain-derived nucleic acids - used to develop which may have cytokine, immune, regulatory, haematopoiesis
                                                                                                                                                                                                                                                                                                                                                                                                                                     Duclert A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-JUL-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-FEB-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO9906552-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       thrombolytic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Uncapped mRNA for EST sequence of human secreted protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                     which may have cytokine, immune, regulatory, haematopoiesis regulating, anti-inflammatory or tumour inhibition activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22-JUN-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    X51757 standard; RNA; 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LeuLeuProGluAsnAsnValLeuSerPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity: 100.000
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Ratio:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          secreted protein; EST; expressed sequence tag; diagnosis; ic; gene therapy; chromosome mapping; signal peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  46
                                                                                                                                                                                                                                                                                                                                                                                                                                     Dumas Milne
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ВP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     anti-inflammatory; tumour inhibition; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97us-0905223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98WO-IB01236
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3.400
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                                                                                                                                                                                                                                                                                                                                                                                                                                     Edwards J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ç,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Identity: 60.000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11
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                                                                                                                                                                                                                                                                                                                                                                                                                                     Lacroix
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The nucleic
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acids encoding
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US-08-860-232-1 x x51757
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          alignment_scores
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Align seg 1/1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ratio: 3.400 Percent Similarity: 100.000
         The specification describes 5' expressed sequence tags (ESTs, see X40825-X41093) for human secreted proteins (see Y01602 and Y11994-Y12260). The proteins given represent the signal peptide and an N-terminal fragment of a secreted protein. The nucleic acid sequences can be used for producing secreted human gene products. They can also be used to develop products for diagnosis and therapy. The proteins obtained may have cytokine activity, cell proliferation/differentiation activity, haematopolesis regulating activity, tissue growth regulating activity, reproductive hormone regulating activity, chemotactic/
                                                                                                                                                                                                      New nucleic acids encoding human secreted cDNA libraries prepared from kidney, fetal muscle, muscle and heart tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      forensic; gene therapy; chromosome mapping; signal peptide; upstream regulatory sequence; cytokine activity; cell proliferation; upstream regulation; haematopolesis regulation; tissue growth regulation;
                                                                                                                                                                                                                                                                                                     Duclert A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Oligoribonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       the signal peptide can be used for directing extracellular secretion a polypeptide or the insertion of a polypeptide into a membrane, or importing a polypeptide into a cell.

This sequence was used in a method to isolate the 5' ESTs of the general sequence was used in a method to isolate the 5' ESTs of the general sequence.
chemokinetic activity,
                                                                                                                                                                      Example 2; Page 15; 622pp; English
                                                                                                                                                                                                                                                                      WPI; 1999-153784/13.
                                                                                                                                                                                                                                                                                                                                                                    01-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                  31-JUL-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9906554-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            reproductive hormone regulation; chemotactic; chemokinetic; haemostatic; thrombolytic; anti-inflammatory; tumour inhibition; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         encoding the human secreted proteins
                                                                                                                                                                                                                                                                                                                                 (GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-JUN-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        secreted protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Quality:
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                                                                                                                                                                                                                                                                                                  Dumas Milne
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                                                                                                                                                                                                                                                                                                                                                                  97US-0905134
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       used to identify 5'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .00
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haemostatic and thrombolytic activity,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                from:
                                                                                                                                                                                                                                                                                                     Edwards
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EST;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C; 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10
                                                                                                                                                                                                                                                                                                    Lacroix
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  46
                                                                                                                                                                                                                      reted proteins - obtained fetal kidney, dystrophic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sequence tag; diagnosis;
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receptor/

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seq_documentation_block:
ID X41349 standard; RNA,
XAC X41349;
AC X
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US-08-860-232-1 x x26652
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                                     be used for producing secreted human gene products. They can also be used to develop products for diagnosis and therapy. The proteins obtained may have cytokine activity, cell proliferation/differentiation activity, haematopoiesis regulating activity, tissue growth regulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             forensic; gene therapy; chromosome mapping; signal peptide; upstream regulatory sequence; cytokine activity; cell proliferation; differentiation; haematopolesis regulation; tissue growth regulation; reproductive hormone regulation; chemotactic; chemokinetic; haemostatic; thrombolytic; antiinflammatory; tumour inhibition; antitumour; ss.
                                                                                                                                                                                                                                                                                                                                                                        New nucleic acids encoding human secreted proteins - obtained cDNA libraries derived from umbilical cord, lymph ganglia,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oligoribonucleotide,
                                                                                                                                                                                                     The patent relates to sequences of 5'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
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Ratio: 3.400
Similarity: 100.000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /SIDS6/gcgdata/geneseq/geneseqn/NA1999.DAT:X41349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                secreted protein; EST; expressed sequence tag; diagnosis;
                                                                                                                                                                      nt relates to sequences of 5' ESTs derived from mRNAs secreted proteins. The nucleic acid sequences can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          46 BP; 10 A;
                                                                                                                                                                                                                                                                        Page 15; 411pp;
                                                                                                                                                                                                                                                                                                                                         and placental tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Dumas Milne Edwards
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97US-0905051
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   46
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                                                                                                                                                                                                                                                                        English
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seq_documentation_block:
ID X30063 standard; RNA,
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AC X30063;
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XX Total Injuries of the ray of the
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US-08-860-232-1 x X41349
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                              x41094 to x41347 represent 5' expressed sequence tags (ESTs) for human secreted proteins, and encode the proteins given in Y12261 to Y12514, respectively. The proteins given represent the signal peptide and an N-terminal fragment of a secreted protein. The nucleic acid sequences can be used for producing secreted human gene products. They can also be used to develop products for diagnosis and therapy. The proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          chemokinetic activity, haemostatic and thrombolytic activity, receptor/ ligand activity, antiinflammatory activity, tumour inhibition activity or other activities. The products can be used in forensic, gene therapy and chromosome mapping procedures. The sequences can also be used for obtaining corresponding promoter sequences. The nucleic acids encoding the signal peptide can be used for directing extracellular secretion of a polypeptide or the insertion of a polypeptide into a cell.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; secreted protein; EST; expressed sequence tag; diagnosis; forensic; gene therapy; chromosome mapping; signal peptide; upstream regulatory sequence; cytokine activity; cell proliferation; differentiation; haematopolesis regulation; tissue growth regulation; reproductive hormone regulation; chemotactic; chemokinetic; haemostat: thrombolytic; anti-inflammatory; tumour inhibition; ss.
                                                                                                                                                                                                                                                                                                                               New nucleic acids encoding human secreted proteins - obtained from cDNA libraries prepared from e.g. liver, ovary, brain, prostate, kidney, lung, umbilical cord, placenta and colon tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Oligoribonucleotide -Cap SEQ ID NO:2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Duclert A, Dumas Milne Edwards J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               X30063 standard; RNA;
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                                                                                                                                                                                                                                                                     2; Page 15;
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                                                                                                                                                                                                                                                                  824pp; English.
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60.000
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                                                                                                                                                                                                     for human
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activity,

nosis and therapy. The proteins cell proliferation/differentiation

activity, haematopoiesis regulating activity, tissue growth regulating activity, reproductive hormone regulating activity, chemotactic/ chemokinetic activity, haemostatic and thrombolytic activity, receptor/ ligand activity, anti-inflammatory activity, tumour inhibition activity

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seq_documentation_block:
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Ratio: 3.400
Percent Similarity: 100.000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       or other activities. The products can be used in forensic, gene therapy and chromosome mapping procedures. The sequences can also be used for obtaining corresponding promoter sequences. The nucleic acids encoding the signal peptide can be used for directing extracellular secretion of a polypeptide or the insertion of a polypeptide into a membrane, or importing a polypeptide into a cell. The present sequence represents an oligoribonucleotide used in an example from the present invention.
                     Specific coupling of the 5' cap of mRNA to amino-functionalised cpd - by eliminating 3' diol, oxidn. of cap diol to aldehyde and reaction with amine, e.g. for isolation of complete RNA, labelling
                                                                                                     Dumas Milne Edwards JG,
                                                                                                                                                        03-AUG-1995;
02-MAY-1995;
                                                                                                                                                                                                                                                                                                                                           modified_base
                                                                                                                                                                                                                                                                                                                                                                                  Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                           Messenger RNA; guanosine 5'-cap; label; immobilisation; capture; polymerase chain reaction; transcription template; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   5'-capped mRNA for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-AUG-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 T43581 standard; mRNA; 47
                                                                            WPI; 1996-506181/50.
                                                                                                                                                                                              29-APR-1996;
                                                                                                                                                                                                                         07-NOV-1996
                                                                                                                                                                                                                                                   W09634981-A2
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                                                                                                                              (GENQ ) GENSET
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                                                                                                                                                        95FR-0009467
95FR-0005221
                                                                                                                                                                                              96WO-FR00651.
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                                                                                                                                                                                                                                                                      /*tag=
                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                  coupling to biotin label via amino linker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   from:
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                                                                                                       Nicolaevna
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Gaps: 0
Percent Identity: 60.000
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                                                                                                       Merenkova
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The first step in a new method for specifically coupling the cap of CC the 5'-end of a eukaryotic mRNA to an amino-functionalised compound CC involves specifically modifying the 3'-end of the mRNA so that the CC last base no longer contains OH groups at the 2' and 3' positions. CC Then, the 2', 3'-cis diol of the methyl guanosine residue at the 5'-end CC can be oxidised to form a 2', 3'-dialdehyde which is ultimately coupled CC with the amino group of the amino-functionalised compound. The method CC is used to label specifically at the 5'-cap, to isolate the 5'-end CC is used to label specifically at the 3'-end of DNA, to produce double of mRNA in a sample, to produce the 5'-end of mRNA or to capture mRNA-CC binding proteins. In a specific example of the coupling method, a CC double-stranded template was prepared by PCR amplification using a CC 5'-primer containing the T' RNA polymerase promoter (T43579) and CC a 3'-primer (T43580). When the template was transcribed in the CC presence of cap analogue m76(5')ppp(5')G, a capped mRNA transcript CC having the present sequence was produced. The 5'-capped mRNA was CC coupled to a biotin label via a hydrazine linker.
  Sequence 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 1; Page 20; 49pp; French.
     BP;
     10
     A; 24 C;
     2 G;
11 U; 0 other;
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seq_documentation_block:
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                                                          09-FEB-1998;
13-APR-1998;
10-AUG-1998;
04-SEP-1998;
                                                                                                                                                                                                                                        PCR primer; secreted protein; fingerprint identification technique; chromosome mapping; human; hereditary disease; diagnosis; cancer; hyperlipidaemia; cardiovascular; neurodegenerative disorder; therapy; autoimmune disease; rheumatic disease; embryogenic disorder; myopathy; renal injury; amino aciduria; hypoglycaemia; male rat infertility; hypertension; ss.
         Bougueleret L,
                                                                                                                                                                                                                 Synthetic
                                                                                                                                                                                                                                                                                                                                Oligonucleotide +Cap for Secreted protein EST isolation.
                                                                                                                                                                                                                                                                                                                                                          18-JAN-2000
                                                                                                                          09-FEB-1999;
                                                                                                                                                    12-AUG-1999
                                                                                                                                                                            WO9940189-A2
                                                                                                                                                                                                                                                                                                                                                                                                             Z40749 standard; RNA; 47 BP
                                 (GEST ) GENSET
                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 LeuLeuProGluAsnAsnValLeuSerPro 10
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6
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98US-0096116.
98US-0099273.
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3.400
100.000
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          Duclert
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Gaps: 0
Percent Identity: 60.000
         Dumas
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6
         Milne Edwards
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seq_documentation_block:
ID X88170 standard; RNA;
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AC X88170;
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CC Antibodies against the proteins encoded by the extended cDNAs are useful in identification of tissue types or cell species, as well as identifying CC tissue specific soluble proteins. The sequences can be used for chromosome mapping and identification of genes associated with hereditary CC diseases or drug response. Signal sequences from the cDNAs can be used in CC construction of secretion vectors. Other sequences derived from the CC extended cDNAs can be used to clone upstream genomic DNA sequences including promoters. This is in turn useful for identifying proteins that interact with promoter sequences. Some of the proteins may be useful in CC diagnosing and treating several disorders including, but not limited to: C cancer, hyperilpidaemia, cardiovascular and neurodegenerative disorders, autoimmune diseases, and rheumatic diseases, embryogenic disorders, infertility and myopathies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Align seg 1/1 to: Z40749
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        x88170 standard; RNA; 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LeuLeuProGluAsnAsnValLeuSerPro
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Ratio:
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lc; gene therapy; chromosome
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
      97US-0069957.
98US-0074121.
98US-0081563.
                                                                                                       98US-0099273
97US-0066677
                                                                                                                                                                                                          98WO-IB01862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10 A; 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        34.00
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          \vdash
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    mapping; secretion vector; primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60.000
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alignment_block:
US-08-860-232-1 x X88170
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity: 100.000
                                                                                                                                                                                                                                                                                                                                                                                                   _documentation_block: x97543 standard; RNA;
 10-AUG-1998;
17-DEC-1997;
09-FEB-1998;
                                                                                                                                                                                                                                                  Secreted protein; human; cytokine; cellular proliferation; cell moveme cellular differentiation; immune system regulator; anti-inflammatory; haematopolesis regulator; tissue growth regulator; tumour inhibitor; reproductive hormone regulator; chemotaxis; chemokinesis; gene therap;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This invention describes novel nucleic acid sequences of extended cDN (see X97813-X97906) which encode human secreted proteins (see Y36129-Y3622) and which have cytostatic, thrombotic and osteopathic activity. The extended cDNAs can be used to express secreted proteins or parts of them or to obtain antibodies capable of binding to the
                                                     17-DEC-1998;
                                                                                24-JUN-1999.
                                                                                                                                                          Key
modified_base
                                                                                                                                                                                                                                                                                                                     Oligonucleotide Cap+ for secreted protein coding sequence isolation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               secreted proteins. They may also be used in diagnostic, forensic, gene therapy and chromosome mapping procedures. Uses also include design of expression vectors and secretion vectors. This sequence represents an oligoribonucleotide primer used in the method of the invention.
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                                                                                                                                                                                                     Homo
                                                                                                                                                                                                                                           genetic
                                                                                                                                                                                                                                                                                                                                                  13-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                             X97543;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10-AUG-1998;
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Ratio:
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98US-0096116.
97US-0069957.
98US-0074121.
                                                     98WO-IB02122
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                                                                                                                                                             Location/Qualifiers
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                                                                                                                                /*tag= a
/mod_base= 7-methylguanosine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dumas Milne Edwards
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      G;
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alignment_scores:
Quality:
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US-08-860-232-1 x X97543
                                                                                                                                                                                                                                                                                                                                                                           This sequence represents an oligonucleotide used to isolate the extended C human secreted protein coding sequences of the invention. The secreted proteins can be used in treating or controlling a variety of human conditions. The secreted proteins may act as cytokines or may affect cellular proliferation or differentiation or may act as immune system regulators, haematopoiesis regulators, tissue growth regulators, cegulators of reproductive hormones or cell movement or have regulators of cellular proliferation or may act as immune system cegulators of reproductive hormones or cell movement or have the control of the procedures to comencactic/chemokinetic, receptor/ligand, anti-inflammatory or tumour conhibition activity. The DNAs can be used in forensic procedures to identify individuals or in diagnostic procedures to identify individuals or in diagnostic procedures to identify the genes corresponding to the extended cDNAs. They are also useful for constructing a high resolution map of the human chromosomes. They can also used for gene therapy to control or treat genetic diseases.
                                                                                                                                                                                                     Quality: 34.00
Ratio: 3.400
Percent Similarity: 100.000
                                                                                         Align seg 1/1 to: X97543 from: 1 to: 47
                                                                                                                                                                                                                                                                                                                                             Sequence 47 BP; 10 A; 24 C; 2 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bougueleret L, Duclert A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 2; Page 12; 516pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New isolated human secreted proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1999-385906/32.
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98US-0081563.
                                                                                                                                                                                                     Length: 10
Gaps: 0
Percent Identity: 60.000
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                                                                                                                                                                                                                                                                                                                                             11 U; 0 other;
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of: US-08-860-232-1 to: Issued_Patents_NA:*

out_format : pfs

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27.00 27.00 27.00 + 27.00 + 27.00

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Database sequences: 262060
Database length: 75620496
Search time (sec): 57.460000
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Query: US-08-860-232-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /cgn2_6/ptodata/1/ina/6_COMB.seq:US-08-482-080A-8 + 31
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6/ptodata/1/ina/PCTUS_COMB.seq:PCT-US91-00909-11
6/ptodata/1/ina/PCTUS_COMB.seq:PCT-US91-00909-12
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6/ptodata/1/ina/5A_COMB.seq:US-08-440-548-60 +
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6/ptodata/1/ina/5C_COMB.seq:US-08-799-173-60 +
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130.12
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; DATE: 198
US-08-047-041A-16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 16,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                       TELEFAX: 202-508-9299 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION: TELEPHONE: 202-508-9100
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 17-AUG-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/446,584
FILING DATE: 06-DEC-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: Patentin Rel CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Fearon, Eric R.
APPLICANT: Nigro, Janice M.
TITLE OF INVENTION: Detecti
TITLE OF INVENTION: Gene
                                                                                                                  PUBLICATION INFORMATION:
                                                                                                                                                                                       ORIGINAL
                                                                                                                                                                                                   MOLECULE TYPE: CI
HYPOTHETICAL: NO
ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES:
                                                                                                                                                     POSITION IN GENOME:
                                              JOURNAL:
VOLUME:
ISSUE: 5
                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Kagan, Sarah PREGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE:
                                                                                                                                   CHROMOSOME/SEGMENT:
                                                                                                                                                                                                                                                       TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OPERATING SYSTEM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE:
                                                                                                                                                                     ORGANISM:
                                                                                                                                                                                                                                                                    STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20001.4597
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                                                                                                                                                                                                                                                                                    nucleic acid
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                                1379-1385
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1001 G Street, N.W.
                                                                                                                                                                                                                                                                                                     22 base pairs
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                                                                                Mol. Cell. Biol
                                                                                                 Lamb,
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                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                       linear
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17-AUG-1992
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                                                                                                                                                                                                                                                                                                                                                                                                                                           Sarah A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US 07/330,566
                                                                                                                                   exon
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alignment_block:
US-08-860-232-1 x US-08-047-041A-16
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                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 07/
ETILING DATE: 06-DEC-1989
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/
FILING DATE: 29-MAR-1989
ATTORNEY/AGENT INFORMATION:
NAME: Kagan, Sarah A:
REGISTRATION NUMBER: 32,14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Baker, Suzanne J.
APPLICANT: Fearon, Eric R.
APPLICANT: Nigro, Janice M.
TITLE OF INVENTION: Detection
TITLE OF INVENTION: Gene
NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
                                                                                                                                                                            TELEFAX: 202-508-9299
NFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 52 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/928,661
FILING DATE: 17-AUG-1992
PRIOR APPLICATION DATA:
                ORGANISM: HOMO S
POSITION IN GENOME:
                                                      ORIGINAL SOURCE:
                                                                     HYPOTHETICAL: I
                                                                                                           MOLECULE TYPE: CDNA
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CITY: Washington
STATE: D.C.
CHROMOSOME/SEGMENT: exon 3
                                                                                                                           TOPOLOGY:
                                                                                                                                            STRANDEDNESS:
                                                                                                                                                                                                                                                      TELEPHONE:
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                                                                                                                        linear
                                   Homo sapiens
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29-MAR-1989
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                                                                                                                                              double
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Gaps: 0
Percent Identity: 100.000
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alignment_block:
US-08-860-232-1 x US-08-047-041A-3
US-08-795-006A-23
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Quality:
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Ratio: 5.143
Percent Similarity: 100.000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 23, Application US/08795006A Patent No. 5840579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Atent No. 30440000 (GENERAL INFORMATION: GENERAL INFORMATION: Boeke, Jef APPLICANT: Brachmann, Rainer APPLICANT: Brachmann, NUCLEIC ACIDS ENCODING P53
                                                                                                                                                                           APPLICATION NUMBER:
FILING DATE:
ATTORNEY_AGENT INFORMATION:
NAME: Kagan, Sarah A
REGISTRATION NUMBER: 32141
REFERENCE/DOCKET NUMBER: 0110
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-508-9100
                                                                                                                 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                          OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/795,006A
FILING DATE: 05-FEB-1997
                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                              SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17 CTTCCTGAAAACAACGTTCTG 37
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VOLUME: 70
PAGES: 245-252
DATE: 1988
                                LENGTH: 52 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDIUM TYPE: Dis
COMPUTER: IBM COI
OPERATING SYSTEM:
                                                                                                                                                        TELEFAX: 202-508-9299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET: 1001 G S
CITY: Washington
STATE: DC
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                  TOPOLOGY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20001
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1001 G Street, NW
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                  linear
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Percent Identity: 100.000
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alignment_scores:

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alignment_block: us-08-860-232-1 \times us-08-795-006A-23
                 alignment_scores:
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                                                                          US-08-930-102A-4
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                                                                                                                                                                                                                                                                                                     INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM: MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Dumas, Jean-Baptiste Milne Edwards
APPLICANT: Merenkova, Irena Nicolaevna
TITLE OF INVENTION: METHOD FOR THE SPECIFIC COUPLING OF THE CAP
TITLE OF INVENTION: OF THE 5'END OF AN MRNA FRAGMENT AND PREPARTION OF MRNA AND
TITLE OF INVENTION: COMPLETE CDNA
                                                                                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: GE
TELECOMMUNICATION INFORMATION:
TELEPHONE: 619-235-8550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: FastSEQ for Windows Version CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 03-AUG-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS
                                                                                                                                                                       MOLECULE TYPE:
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17
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                                                                                            OTHER INFORMATION: OTHER INFORMATION:
                                                                                                                                                                                                        LENGTH: 46 base pairs TYPE: nucleic acid STRANDEDNESS: single TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 29-APR-1996
APPLICATION NUMBER: FR95
FILING DATE: 02-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: PCT/I
                                                                                                                                 LOCATION:
                                                                                                                                                                                                                                                                                                                                          TELEFAX: 619-235-0176
                                                                                                                                                                                                                                                                                                                                                                                                                     REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: FR95/09467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
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                                                                                                                                                   NAME/KEY: misc_feature
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Quality:
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620 Newport Center Drive, 16th Floor
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5.143
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                                                                                            /label= m7Gppp
/note= "N is m
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Gaps: 0
Percent Identity: 100.000
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; OTHER INFORMATION: ; OTHER INFORMATION: US-08-930-102A-5
alignment_scores:
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                                                                                                                                                                                                                                                 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 46 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION: TELEPHONE: 619-235-8550
                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 03-AUG-1995
ATTORNEY/AGENT INFORMATION:
NAME: Ned A. Israelsen
REGISTRATION NUMBER: 29,6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Dumas, Jean-Baptiste Milne Edwards
APPLICANT: Merenkova, Irena Nicolaeevna
TITLE OF INVENTION: METHOD FOR THE SPECIFIC COUPLING OF THE CAP
TITLE OF INVENTION: OF THE 5'END OF AN MRNA FRAGMENT AND PREPARTION OF MRNA AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: FastSEQ for Windows Version CURRENT APPLICATION DATA:
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                                                                                                                                                                           MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: PCT/FI
FILING DATE: 29-APR-1996
APPLICATION NUMBER: FR95/
FILING DATE: 02-MAY-1995
APPLICATION NUMBER: FR95/
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TOPOLOGY: lir
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER:
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                                                                                                                LOCATION:
                                                                                                                                    NAME/KEY:
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                                                                            /note=
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Percent Identity: 60.000
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Quality:

Ratio:

34.00

Length: Gaps:

Percent Similarity: 100.000

Percent Identity: 60.000

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alignment_block:
US-08-860-232-1 x US-08-726-807B-54
seq_name: /cgn2_6/ptodata/1/ina/6_COMB.seq:US-09-258-367-54
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                                                                                                             Align seg 1/1 to: US-08-726-807B-54
                                                                                                                                                                                                          Percent Similarity:
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                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: (512) 474-7577
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REGISTRATION NUMBER: P-43,363
REFERENCE/DOCKET NUMBER: ARSB
TELECOMMUNICATION: INFORMATION:
TELEPHONE: (512) 418-3000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/004,868
FILING DATE: 05-0CT-1995
ATTORNEY/AGENT INFORMATION:
NAME: MCMILLIAN, Nabeela R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Parmacek, Michael S.
APPLICANT: Solway, Julian
TITLE OF INVENTION: PROMOTER FO
TITLE OF INVENTION: EXPRESSION
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                                    TYPE: nucleic acid
STRANDEDNESS: single
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                                                                                                               from: 1
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EARLIER APPLICATION NUMBER: 08/726,807
EARLIER FILING DATE: 1996-10-07
NUMBER OF SEQ ID NOS: 55
SOFTWARE: PATENTIN VET. 2.0
SEQ ID NO 55
LENGTH: 47
TYPE: DNA
PATENTED: Artificial Sequence
alignment_block:
US-08-860-232-1 x US-09-258-367-55/rev
                                                                                                                                                                                        ; OTHER INFORMATION: Description of Artificial Sequence: ; OTHER INFORMATION: Primer US-09-258-367-55
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   Sequence 55, Application US/09258367
   Patent No. 6114311
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US-08-860-232-1 x US-09-258-367-54
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                                                                                                                               alignment_scores:
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                                                                   Percent Similarity:
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LENGTH: 47
TYPE: DNA
ORGANISM: Artificial Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: PARMACEK, MICHAEL S.
APPLICANT: SOLWAY, JULIAN
TITLE OF INVENTION: PROMOTER FOR SMOOTH MUSCLE CELL EXPRESSION
FILE REFERENCE: ARCD:310
CURRENT APPLICATION NUMBER: US/09/258,367
CURRENT FILING DATE: 1999-02-26
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CURRENT FILING DATE: 1999-02-26
EARLIER APPLICATION NUMBER: 08/726,807
EARLIER FILING DATE: 1996-10-07
NUMBER OF SEQ ID NOS: 55
SOFTWARE: Patentin Ver. 2.0
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APPLICANT: SOLMAY, JULIAN
TITLE OF INVENTION: PROMOTER FOR SMOOTH MUSCLE
FILE REFERENCE: ARCD:310
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                                                              32.00
3.556
90.000
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90.000
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Percent Identity: 50.000
                                                      Length: 10
Gaps: 0
Percent Identity: 50.000
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Align seg 1/1 to reverse of: US-09-258-367-55

from:

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LeuLeuProGluAsnAsnValLeuSerPro 10

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alignment_block:
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                                                                                                                                           US-08-171-389-8
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                                Percent Similarity:
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                                                                                                                                                                                                                                                                                                               TELEFAX: (415) 324-09 INFORMATION FOR SEQ ID NO:
                                                                                                                                                  HYPOTHETICAL: NO
ORIGINAL SOURCE:
INDIVIDUAL ISOLATE:
                                                                                                                                                                                        MOLECULE TYPE: DN
                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 4600-0175/G19P3
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-0880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 22-JUN-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 23-DEC-PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: Sequence-Directed DNA Binding TITLE OF INVENTION: Molecules, Compositions and Methods NUMBER OF SEQUENCES: 641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Turin, Lisa APPLICANT: Fry, Kirk E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 08/123,936 FILING DATE: 17-SEP-1993
                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Fabian, Gary R. REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 07/723,618 FILING DATE: 27-JUN-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: FILING DATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CITY: Redwood City
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                                                                                                                                                                                                                                            STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
                                                                                                                                                                                                                                                                               LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
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                                                                  Quality:
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                                                                                                                                                                                                                                                         : 48 base pairs
nucleic acid
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                                                  Ratio:
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Cantor, Charles R.
Andrews, Beth M.
                                                                                                                                                                                                                              linear
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23-DEC-1992
                                                                                                                                                                                                          DNA (genomic)
                                31.00
4.429
77.778
                                                                                                                                                                                                                                            double
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320: 8:
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                                                                                                                                                       Human choline acetyltransferase gene
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                                                                                                                                                                                                                                                                                                                                                                                               33,875
                         Length: 9
Gaps: 0
Percent Identity: 66.667
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alignment_block:
US-08-860-232-1 x US-08-123-936-8
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                                                                                                   alignment_scores:
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                                                    Percent Similarity:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US 07/996,783
FILING DATE: 23-DEC-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/723,618
FILING DATE: 27-JUN-1991
                                                                                                                                                                                     MOLECULE TYPE: DE HYPOTHETICAL: NO ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                       REGISTRATION NUMBER: 33,875
REFERENCE/DOCKET NUMBER: 46
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-0880
                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 27-JUN-1991 ATTORNEY/AGENT INFORMATION:
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CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                        TOPOLOGY:
                                                                                                                                                                                                                                                    TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: FILING DATE:
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                                                                                                                                                                                                                                                                                       LENGTH: 48 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Quality:
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                                                                     Ratio:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               E: Floppy disk
IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Genelabs Technologies, Inc.
                                                                                                                                                                                                                      DNA (genomic)
                                                  31.00
4.429
77.778
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                                                                                                                                                                                                                                                                                                                     3) 327
324-0960
300: 8:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cynthia A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Screening Assay for the Detection
                                                                                                                                                                     Human choline acetyltransferase gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US/08/123,936
                                           Length: 9
Gaps: 0
Percent Identity: 66.667
                                                                                                                                                                                                                                                                                                                                                                                          4600-0075.32/G19P2
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Align seg 1/1

to: US-08-123-936-8

from:

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ProGluAsnAsnValLeuSerProLeu 11

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alignment_block:
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US-08-860-232-1 x US-08-475-228A-8
                                                 Percent Similarity:
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APPLICATION NUMBER: US 07,
FILING DATE: 27-JUN-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08,
FILING DATE: 22-JUN-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                         TELEFAX: (415) 324-0960 NEORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: 34,444
REFERENCE/DOCKET NUMBER: 460
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 48 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 08
FILING DATE: 17-SEP-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07
FILING DATE: 23-DEC-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Turin, Lisa M.
APPLICANT: Fry, Kirk E.
TITLE OF INVENTION: Sequence-Directed DNA Binding
TITLE OF INVENTION: Molecules, Compositions and M.
NUMBER OF SEQUENCES: 664
                                                                                                                                                                                            ORIGINAL SOURCE
                                                                                                                                                                                                                              MOLECULE TYPE:
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FILING DATE: 06-JUN-
PRIOR APPLICATION DATA:
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CURRENT APPLICATION DATA:
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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CITY: Redwood City
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                                                                  Quality:
Ratio:
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Cantor, Charles R.
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27-JUN-1991
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                                                                                                                                                                                                                                                                   double
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Beth M.
                                                                                                                                                                        Human choline acetyltransferase gene
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              9 Gaps: 0 Percent Identity: 66.667
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; INDIVIDUAL ISOLATE: US-08-482-080A-8
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                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/171,389

FILING DATE: 20-DEC-1993

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/123,936

FILING DATE: 17-SEP-1993

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/996,783

FILING DATE: 23-DEC-1992
                                                                                                                                                                                       TELEFAX: (650) 324-09 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                    MOLECULE TYPE: DN
                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: FILING DATE: 23-DEC-PRIOR APPLICATION DATA:
                                   ORIGINAL SOURCE
                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: 46:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 324-0880
                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0:
FILING DATE: 22-JUN-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION DATA:
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OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET: 505 Penouse
CITY: Redwood City
                                                                                                                                                                                                                                                                                 NAME: Brady, John F. REGISTRATION NUMBER: 39,118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3 ProGluAsnAsnValLeuSerProLeu 11
                                                                                                         STRANDEDNESS: double
                                                                                                                                                                                                                        TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE:
                                                                                                                                                  ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94063
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                                                                                                                               nucleic acid
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                                                                                                                                                  48 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      505 Penobscot Drive
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Edwards, Cynthia A
Cantor, Charles R.
Andrews, Beth M.
                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Genelabs Technologies, Inc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Floppy disk
                                                                        DNA
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                                                                                                                                                                                                         324-0960
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                                                                        (genomic)
                                                                                                                                                                                                                                                                                                                                                             US 08/081,070
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                                                                                                                                                                                                                                                                                                                                                                                                                    US 07/723,618
               Human choline acetyltransferase gene
                                                                                                                                                                                         8..
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alignment_scores:

Quality: Ratio:

31.00 4.429

Length: Gaps:

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alignment_block:
US-08-860-232-1 x PCT-US93-12388-8
                                                                                                                                                                                     alignment_scores:
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INDIVIDUAL ISOLATE: Human choline acetyltransferase gene
PCT-US93-12388-8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-860-232-1 x US-08-482-080A-8
                                   Align seg 1/1 to: PCT-US93-12388-8 from:
                                                                                                                                Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Align seg 1/1 to: US-08-482-080A-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 8, Application PC/TUS9312388 GENERAL INFORMATION:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                   REGISTRATION NUMBER: 33,875
REFERENCE/DOCKET NUMBER: 46
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 324-0880
TELEFAX: (415) 324-9960
INFORMATION FOR SEQ ID NO: 8:
                                                                                                                                                                                                                                                                                                 TOPULOU. DN MOLECULE TYPE: DN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/996,783
FILING DATE: 23-DEC-1992
ATTORNEY/ACENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08
FILING DATE: 17-SEP-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3 ProGluAsnAsnValLeuSerProLeu 11
                                                                                                                                                                                                                                                                                                                                                        TYPE: nucleic acid
STRANDEDNESS: doub
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET: 505 Penobscot Drive CITY: Redwood City
3 ProGluAsnAsnValLeuSerProLeu 11
                                                                                                                                                                                                                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Fabian, Gary R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: PCT/US93/12388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 48 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE:
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                                                                                                                                                                   Quality:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   94063
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                                                                                                                                                   Ratio:
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                                                                                                                                                                                                                                                                                                                                           linear
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                                                                                                                              31.00
4.429
77.778
                                                                                                                                                                                                                                                                                                                       DNA (genomic)
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                                                                                                                                                                                                                                                                                                                                                            double
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    us 08/123,936
                                                                                                                          Length: 9
Gaps: 0
Percent Identity: 66.667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Identity: 66.667
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alignment_block:
US-08-860-232-1 x US-08-171-389-79
                                                                                                      alignment_scores:
                                                                                                                                                         ; INDIVIDUAL ISOLATE: Human choline acetyltransferase US-08-171-389-79
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                                                  Percent Similarity:
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                                                                                                                                                                                                                                                                                          TELEFAX: (415) 324-0960
INFORMATION FOR SEQ ID NO: 7
SEQUENCE CHARACTERISTICS:
LENGTH: 49 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
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APPLICANT: Fry, Kirk E.
TITLE OF INVENTION: Sequence-Directed DNA Binding
TITLE OF INVENTION: Molecules, Compositions and Methods
TITLE OF SEQUENCES: 641
                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 07/723,618
FILING DATE: 27-UN-1991
PRIOR APPLICATION DATA:
APPLICATION UNBER: US 08/081,070
FILING DATE: 22-UN-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                         HYPOTHETICAL: NO ORIGINAL SOURCE:
                                                                                                                                                                                                         MOLECULE TYPE: DN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                 TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Fabian, Gary R. REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 08/123,936 FILING DATE: 17-SEP-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET:
                                                                                                                                                                                                                                             TOPOLOGY:
                                                                                                                                                                                                                                                                            TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                               TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STATE:
                                                                                                                                                                                                                                                          STRANDEDNESS:
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                                                                                    Quality:
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                                                                    Ratio:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Andrews, Beth M.
                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                  (415) 324-0880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Genelabs Technologies, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER: US 07/996,783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Floppy disk
                                                                                                                                                                                                                         DNA (genomic)
                                                31.00
4.429
77.778
                                                                                                                                                                                                                                                            double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US/08/171,389
                                                                                                                                                                                                                                                                                                                                                                                                                 33,875
                                                                                                                                                                                                                                                                                                                                79:
                                                Gaps:
Percent Identity:
                                                                                                                                                                                                                                                                                                                                                                                                   4600-0175/G19P3
                                                  66.667
                                                                    0 9
                                                                                                                                                                       gene
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Align seg 1/1 to: US-08-171-389-79 from: 1

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49

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; TOPOLOGY: linear; MOLECULE TYPE: DNA (ge; HYPOTHETICAL: NO ORIGINAL SOURCE; INDIVIDUAL ISOLATE: US-08-123-936-79
                                                                                                  alignment_block:
us-08-860-232-1 x us-08-123-936-79
                                                                                                                                                                                                           alignment_scores:
Quality:
                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Fabilan, Gary R.

REGISTRATION NUMBER: 33,875

REFERENCE/DOCKET NUMBER: 4600-0075.32/G19P2

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 324-0880

"ELEFAX: (415) 324-0960

INFORMATION FOR SEQ ID NO: 79:

SEQUENCE CHARACTERISTICS:

LENGTH: 49 base pairs

TYPE: nucleic acid

STRANDEDNESS: double

TOPOLOCY: 11002F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 seq_name: /cgn2_6/ptodata/1/ina/5B_COMB.seq:US-08-123-936-79
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                                                                                                                                                                   Ratio:
Percent Similarity:
                                                             Align seg 1/1 to: US-08-123-936-79 from: 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/996,783
FILING DATE: 23-DEC-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/723,618
FILING DATE: 27-JUN-1991
ATTORNEY/ACENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  equence 79, Application US/08123936 atent No. 5726014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ZIP: 94003
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: IBM PC compatible
COMPUTER: IBM PC PC-DOS/MS-DOS
PC-DOS/MS-DOS
#1.0/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/123,936
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: 6
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Edwards, Cynthia A. APPLICANT: Cantor, Charles R. APPLICANT: Andrews, Beth M. APPLICANT: Turin, Lisa M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19 CCTAATAATAACAGTCTTTGCCCTCTT 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
ZIP: 940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET: 505 Penous.
CITY: Redwood City
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3 ProGluAsnAsnValLeuSerProLeu 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE:
ProGluAsnAsnValLeuSerProLeu 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             E: Genelabs Technologies, Inc.
505 Penobscot Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    USA
                                                                                                                                                                                                                                                                                                                                                                        linear
E: DNA (genomic)
                                                                                                                                                                   31.00
4.429
77.778
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                                                                                                                                                                                                                                                                                                               Human choline acetyltransferase gene
                                                                                                                                                               Length: 9
Gaps: 0
Percent Identity: 66.667
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19 CCTAATAATAACAGTCTTTGCCCTCTT 45

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9b_est14:AJ237252

9b_est14:AJ237252

9b_est35:BE387699

9b_est5:AA515004

9b_est7:AA515004

9b_est7:AA878824

9b_est7:A195165

9b_est7:A195165

9b_est12:A1664266

9b_9ss24:GGA350127

9b_est19:AV554548

9b_est1:AA119098

9b_est1:AA119098

9b_est1:AA119098

9b_est1:AA11338

9b_est1:AA11338

9b_est1:AA11338
                                                                                                                                                                                                                                                         gb_est12:AI748865
gb_est5:AA584618
gb_est7:AA910226
gb_est21:AW248622
gb_est38:R42058
                                                                                                                                                                                                                                                                                                                                                     gb_est2:AA196079
gb_est8:AII50170
gb_est11:AI614043
gb_est5:AA641043
gb_est5:AA683896
gb_est5:AA683896
gb_est37:H45714
gb_est37:F31384
gb_est37:F31384
gb_est37:F31384
                                                                                                                                                                                                          gb_est5:AA593486
gb_gss19:B03225
gb_est7:AA991999
gb_est7:AA932036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     score_list:
Sequence
                                                                                                                                                                                                                                                                                                                      gb_est2:AA206512
gb_est11:AI538057
gb_est6:AA854290
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gb_est5:AA587946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Database sequences: 7189864
Database length: -1203564053
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Query length: 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Search information block:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -MODEL=frame+_p2n.model -DEV=x1p
-Q=/vgn2_1/USPTO_spool/US08860232/runat_11122000_153405_14796/app_query.fasta_1.67
-Q=/vgn2_1/USPTO_spool/US08860232/runat_11122000_153405_14796/app_query.fasta_1.67
-DB=EST -QEMT=fastap -SUFFIX-11m60.rst -GAPDF=12.000
-GAPEXT=4.000 -MINMATCH-0.100 -LOOPCL=0.000 -LOOPEXT=0.000
-QGAPDF=4.500 -QGAPEXT=7.0.00 -VGAPDF=10.000 -VGAPEXT=0.500
-FGAPOP=6.000 -FQAPEXT=7.000 -VGAPDF=10.000 -VGAPEXT=0.500
-DELOP=6.000 -PGAPEXT=7.000 -START=1 -MATRIX=blosum62
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR_SCORE=pct
-THR_MAX=100 -THR_MIN=0 -ALIGN=15 -MODE-LOCAL -OUTFMT=pfs
-NORM=ext -MINLEN=0 -ALIGN=15 -MODE-LOCAL -OUTFMT=518
-NORM=ext -MINLEN=0 -MAXLEN=60 -USER=US08860332_@CGN1_1_1780
-NCPU=6 -ICPU=3 -LONGLOG -NO_XLPXY -WAIT -THREADS=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Results
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Copyright (c)
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     AAB54290 aj5505 sl Soares_parat
AAF54865 at79bl1.xl Barstead col
AA584618 mo08h03.sl NC_CGAP_Kid
AA910226 oj39f04.sl NC_CGAP_Kid
AA910226 oj39f04.sl NC_CGAP_Kid
AA910226 oj39f04.sl NC_CGAP_Kid
AA9248622 2820745.3prime NIH_MGC_
R42065 yg05h08.sl Soares infant
AA593486 nn25h11.sl NC_CGAP_GC3
AA931999 ot01f02.sl NC_CGAP_GC3
AA931036 oo35908.sl NC_CGAP_Lu5
AA947665 og32d02.sl NC_CGAP_Lu5
AA932036 oo35908.sl NC_CGAP_Ear
AA932036 oo35908.sl NC_CGAP_Lu5
AA932037 aj41bl2.sl Soares_Cesti
AA515004 nf64e03.sl NC_CGAP_Li5
AA972473 op42a11.sl Soares_NUSU
AA878824 of89c08.sl NC_CGAP_Li5
AA972473 op42a11.sl Soares_NUSU
AA972473 op42a11.sl Soares_NUSU
AA972473 op42a11.sl Soares_NUSU
AJ232133 Gallus gallus anonymous
AV534548 AV554548 Arabidopsis th
AA112333 zt97h02.rl Soares_Lesti
AA112338 sa55e03.yl Gm-c1004 Gly
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| Gm-c1004 Gly
| Neurospora c
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gb_est7:AA907811
gb_est11:AI500674
gb_est39:T52826
                                                                                                                                                           BASE CO
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AUTHORS
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VERSION
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    Quality:
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LOCUS AI156636
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alignment_block:
US-08-860-232-1 x AI156636
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Ratio: 3.750
Similarity: 100.000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Washington University School of Medicinep
4444 Forest Park Parkway, Box 8501, St. La
Tel: 314 286 1810
Fax: 314 286 1810
Email: mouseest@watson.wustl.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Prace considered overall poor quality Possible reversed chone: similarity on w. Seq primer: -28mil rev2 ET from Amersham High quality sequence stop: 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Email: mouseest@watson.wustl.edu
This clone is available royalty-free
IMAGE Consortium (info@image.llnl.gov
MGI:932418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Contact: Marra M/Mouse EST Project WashU-HHMI Mouse EST Project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The WashU-HHMI Mouse EST Project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Marra,M., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dubuque,T. Geisel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M., Schellenberg,K., Steptoe,M., Tan,F., Underwood,K., Moore,B., Theising,B., Wylie,T., Lennon,G., Soares,B., Wilson,R. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unpublished (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (bases 1 to 34)
                                                                                                                                                                                                                /note="Vector: pT7T3D-Pac (Pharmacia) with a modified polylinker; 1st strand cDNA was prepared from mammary gland tissue from a lactating female, and was then primed with a Not I - oligo(dT) primer. Double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of the modified pT7T3 vector. Library is normalized. Library was constructed by Bento Soares and M. Fatima Bonaldo. "
                                                                                                                                                                                                                                                                                                                                                                                                                         /clone_lib="Soares_mammary_gland_NMLMG"
/sex="female (lactating)"
/tissue_type="mammary gland"
/lab_host="DH108"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /db_xref="taxon:10090"
/clone="IMAGE:1494814"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
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v) for further
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AA907811 0901904.s2 NCI_CGAP_
A1500674 tn99b01.x1 NCI_CGAP_
T52826 ya81b02.s1 Stratagene
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cDNA was
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JOURNAL COMMENT
                        seq_documentation_block:
LOCUS AA587946
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TITLE
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SOURCE
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ORIGIN
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AA587946 46 bp
nm88f04.sl NCI_CGAP_Co9
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1 (bases 1 to 34)
NCI-CGAP http://organ.com/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AI290158 34 bp mRNA EST 30-NOV-1998 qw21c03.x1 NCI_CGAP_Ut4 Homo sapiens cDNA clone IMAGE:1991716 3' similar to TR:Q15214 Q15214 SALIVARY PROLINE-RICH PROTEIN 1 ;, mRNA
                                                                                                                                                                                                                                                                                                                                     Quality:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Trace considered overall poor quality
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cDNA Library Preparation: Life Technologies, Inc. cDNA Library Arrayed by: Greg Lennon, Ph.D. DNA Sequencing by: Washington University Genome S Clone distribution: NCI-CGAP clone distribution i found through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Emall: Robert_Strausberg@nih.gov
Tissue Procurement: Christopher Moskaluk, M.D., Ph.D.,
Emmert-Buck, M.D., Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unpublished (1997)
Contact: Robert Strausberg, Ph.D.
Tel: (301) 496-1550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anat
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High quality sequence stop: 1.
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3.625
80.000
                                                                                                                                                                                                                                                                                                                                                                                                                              /note="Organ: uterus; Vector: pCMV-SPORT6; Site_1: Sall Site_2: NotI; Cloned unidirectionally. Primer: Oligo c Average insert size 1.48 kb. Life Technologies catalog 11542-016" 2 g 6 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       pooled tumors"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /clone="IMAGE:1991716"
/clone_lib="NCI_CGAP_Ut4"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
/db_xref="taxon:9606"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 'lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tissue_type="serous papillary carcinoma, high grade,
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  sapiens cDNA
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  ST 25-SEP-1997
clone IMAGE:1075327
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AUTHORS
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                                                                                    seq_documentation_block:
LOCUS AA196079
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                                                                                                                                            seq_name: gb_est2:AA196079
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                                                                                                                                                                                                                            2 LeuProGluAsnAsnValLeuSerProLeu 11
                                    AA196079 54 bp mRNA EST 10-MAR-1998 zp98d07.s1 Stratagene muscle 937209 Homo sapiens cDNA clone IMAGE:628237 3' similar to gb:M73628 KAPPA CASEIN PRECURSOR (HUMAN
);, mRNA sequence
AA196079
                                                                                                                                                                                                                                                                                                                                                                                                                       Quality:
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Insert Length: 616 Std Error: 0.00
Seg primer: -40ml3 fwd. ET from Amersham
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Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tumor Gene Index
Unpublished (1997)
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AA587946
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Contact: Robert Strausberg, Ph.D. Tel: (301) 496-1550
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note="Organ: colon: Vector: pT7T3D-Pac (Pharmacia) with a modified polylinker; lst strand cDNA was prepared from RER+ colon tumor, and was then primed with a Not I oligo(dT) primer. Double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of the modified pT7T3 vector. Library is not normalized. Library was
                                                                                                                                                                                                                                                                                                                                                                          28.00
3.500
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/clone="IMAGE:1075327"
/clone_11b="NCI_CGAP_CO9"
/tissue_type="colon tumor RER+"
/lab_host="DH10B"
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Primates;
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ACCESSION

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                                                                         KEYWORDS
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                                                                                                                                                                                                                                                                                                                            LeuLeuProGluAsnAsnValLeuSerPro 10
                                                                                   qf3407.xl Soares_testis_MHT Homo sapiens cDNA clone IMAGE:1751893
3' similar to gb:X59268 TRANSCRIPTION INITIATION FACTOR IIB (HUMAN ); COntains TAR1.bl MSR1 repetitive element ;, mRNA sequence.
AI150170 AR150170.1 GI:3678639
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EST.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Quality:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This clone is available royalty-free through LINL; contact the IMAGE Consortium (info@image.llnl.gov) for further information. Trace considered overall poor quality insert Length: 797 Std Error: 0.00
Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae,
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Seq primer: -40M13 fwd. from Amersham
High quality sequence stop: 1.
Location/Qualifiers
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                                                         numan.
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/lab_host="SOLR (kanamycin resistant)"
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/db_xref="GDB:5048471"
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AUTHORS
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US-08-860-232-1 x AI150170/rev
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                                                                               AUTHORS
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 56)

Marra, M., Hillier, L., Kucaba, T., Martin, J., Beck, C., Wylie, T., Underwood, K., Steptoe, M., Theising, B., Allen, M., Bowers, Y., Person, B., Swaller, T., Gibbons, M., Pape, D., Harvey, N., Schurk, R., Ritter, E., Kohn, S., Shin, T., Jackson, Y., Cardenas, M., McCann, R., Waterston, R. and Wilson, R.
                                                                                                                                                                                                                                                 mm33f01.y1 Stratagene mouse skin (#937313) Mus IMAGE:523321 5', mRNA sequence.
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NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
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                                                                                                                                                                         house mouse.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:1751893"
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3.500
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                                                                                                                                                                                                                                                                           musculus cDNA clone
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US-08-860-232-1 x AI614604
 COMMENT
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LOCUS AA641043
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                                                                                                                                                                                                                                                                                                                seq_name: gb_est5:AA641043
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                                                                                                                                                                                                                                                                                                                                               CTCCTACCATCTCCAAATGTCCTTAAATGTTTA
                                                                                                                                                                                              mrNA
pr25al0.rl NCI_CGAP_Pr2 Homo sapiens cDNA clone IMAGE:1168986
similar to gb:U02389 MITOCHONDRIAL LON PROTEASE HOMOLOG PRECURSOR
(HUMAN); mRNA sequence.
AA641043
                                          Eukaryota; Metazoa; Chordata; Craniata; Verte
Mammalla; Eutherla; Primates; Catarrhini; Hon
1 (bases 1 to 58)
NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anat
               Tumor Gene Index Unpublished (1997)
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Putative full length read
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
This read is a RESEQUENCE of a previously sequenced mouse clone
This read has been verified (found to hit its original self in t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tel: 314 286 1800
Fax: 314 286 1810
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Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
                                                                                                                                                                                  AA641043.1 GI:2566293
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                                                                                                                                Homo sapiens
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3.111
81.818
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/strain="C57BL/6"
/db_xref="taxon:10090"
/clone="IMAGE:523321"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /clone_lib="Stratagene mouse skin (#937313)"
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Strausberg, Ph.D
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Gaps: 0
Percent Identity: 63.636
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6
                                                                                                Craniata; Vertebrata; Catarrhini; Hominidae;
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                                                Genome Anatomy Project (CGAP),
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                                            REFERENCE
AUTHORS
TITLE
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seq_name: gb_est7:AA878695
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                                                                                                                                                                                                                                                                                                                                                                                                                                               3 ProGluAsnAsnValLeuSerPro 10
                                                                                                                                                                                                                                                                                                                                                                                                          CCACCCCATAATACTCTTTCACCC 27
                                                                                                                                                                                                                                oj23c05.sl NCI_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1493000 3/similar to TR:014626 Q14626 INCOMPLETE INTERLEUKIN-11 RECEPTOR AN878695
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Ratio:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Email: Robert_Strausberg@nih.gov
Tissue Procurement: W. Marston Linehan, M.D., Rodrigo Chuaqui, M.D.,
Michael Emmert-Buck, M.D., Ph.D.
cDNA Library Preparation: David B. Krizman, Ph.D.
cDNA Library Arrayed by: Genome Systems Inc., Greg Lennon, Ph.D.
DNA Sequencing by: Washington University Genome Sequencing Center
Clone distribution: NCI-CGAP clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
www-bio.llnl.gov/bbrp/image/image.html
                                                   Mammalia; Eutheria; Primates; Catarrhini; Hom
1 (bases 1 to 43)
NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anat
                                                                                                                                                                                               AA878695.1 GI:2987660 EST.
                 Unpublished (1997)
                                         Tumor Gene Index
                                                                                                                                     Eukaryota; Metazoa;
                                                                                                                                                     Homo sapiens
                                                                                                                                                                             human
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Location/Qualifiers
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Email: Robert_Strau
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2 c 28 g 18 t
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/db_xref="taxon:9606"
/clone="IMAGE:1168986"
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Strausberg, Ph.D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length: 8
Gaps: 0
Percent Identity: 62.500
                                                                                                                 Chordata;
Primates;
                                                                                                             Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
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                                                       Anatomy Project (CGAP),
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SOURCE
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US-08-860-232-1 x AA878695/rev
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LOCUS AA683896
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                                                                                                                                                                                  REFERENCE
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Ratio: 3.000
Percent Similarity: 100.000
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                         JOURNAL
                                              TITLE
                                                                                                                                                           AUTHORS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 LeuProGluAsnAsnValLeuSerPro 10
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                                                                                                                                                                                                                                                                                                                                                                              AA683896 50 bp mRNA EST 09-DEC-1997 vr06e08.rl Knowles Solter mouse blastocyst B3 Mus musculus cDNA clone IMAGE:1111046 5' similar to gb:X14678 Mouse TPA-induced TIS11
                                                                                                   1 (bases 1 to 50)
Marra,M., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dub Geisel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M., Schellenberg,K., Steptoe,M., Tan,F., Underwood,K., Moore,B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Insert Length: 1289 Std Error: 0.00
Seq primer: -40m13 fwd. ET from Amersham
High quality sequence stop: 1.
Location/Qualifiers
                                         Theising,B., Wylie,T., Lennon,G., Soares,B., Wilson,R. and Waterston,R.
The WashU-HHMI Mouse EST Project
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Unpublished (1996)
Contact: Marra M/Mouse EST Project
                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                 Mus musculus
                                                                                                                                                                                                                                                                                                                                            AA683896
                                                                                                                                                                                                                                                                                                                                                       mRNA (MOUSE);, mRNA sequence.
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                                                                                                                                                                                                                                                                      house mouse
                                                                                                                                                                                                                                                                                                                  AA683896.1 GI:2670482
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DNA Sequencing by: Washington University Genome Sequencing Center
Clone distribution: NCI-CGAP clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /clone="IMAGE:1493000"
/clone_lib="NCI_CGAP_Kid5"
/tissue_type="2 pooled tumors (clear cell type)"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /db_xref="taxon:9606"
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Percent Identity:
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                                                                                                                                                         Bowles, M., Dietrich, N., Dubuque, T.,
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LOCUS H45714
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                                                                                                                                                          .M., Hultman,M., Kucaba,T., Le,M., Lennon,G., Marra,M., Parsons,J. Rifkin,L., Rohlfing,T., Soares,M., Tan,F., Trevaskis,E., Waterston,R., Williamson,A., Wohldmann,P. and Wilson,R.

The WashU-Merck EST Project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  H45714 55 bp mRNA EST 31-JUL-1995 yp23a05.r1 Soares breast 3NbHBst Homo sapiens cDNA cLone IMAGE:188240 5' similar to SP:NIIM_BOVIN Q02375 NADH-UBIQUINONE OXIDOREDUCTASE 18 KD SUBUNIT PRECURSOR ;, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 55)

Hillier, L., Clark, N., Dubuque, T., Elliston, K., Hawkins, M., Holman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Quality:
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Location/Qualifiers
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                      Tel: 314 286 1800
Fax: 314 286 1810
                                                               Washington University School of Medicine 4444 Forest Park Parkway, Box 8501, St. 1
                                                                                                                  Unpublished (1995)
Contact: Wilson RK
                                                                                                                                                                                                                                                                                                                                                                                                    EST
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                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                          human.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Washington University School of MedicineP
Email: est@watson.wustl.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WashU-HHMI Mouse EST Project
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note-*Organ: embryo; Vector: pSPORT; Site_1: NotI;
Site_2: SalI; Cloned unidirectionally from mRNA prepared
from 800 blastcysts. primer: SalI(dT):
5'-CGGTCGACCGTCGACCGTTTTTTTTTTTTTTT-3'. cDNAs were
cloned into the NotI/SalI sites of a pSPORT vector (Life
Technologies). Two different size selections: B1 (larger
inserts) and B3."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Mus musculus"
/strain="B6D2 F1/J"
/db_xref="taxon:10090"
/clone="IMAGE:1111046"
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3.375
88.889
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/tlssue_type="blastocyst"
/dev_stage="embryo (pre-implantation)"
/lab_host="DH10B"
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                                                                                                                                                                                                                                                                                                                                                                                                                             seq_name: gb_est37:F31384
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                                                                                                                                                     TITLE
                                                                             MEDLINE
                                                                                                                                                                                        AUTHORS
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                                                                                       Mammaila: Eutheria: Primates: Catarrhini: Hominidae: Homo.

1 (bases 1 to 58)

Lanfranchi.G., Muraro, T., Caldara, F., Pacchioni, B., Pallavic Pandolfo, D., Toppo, S., Trevisan, S., Scarso, S. and Valle, G. Identification of 4370 expressed sequence tags from a 3'-end-specific cDNA library of human skeletal muscle by DNA sequencing and filter hybridization genome Res. 6 (1), 35-42 (1996)
 CRIBI Biotechnology Centre University of Padua Via Trieste 75, 35121 Padu
                                                        Contact: Valle G.
                                                                                                                                                                                                                                                                                                                                        HSPD22527 HM3 Homo sapiens cDNA clone s4000115C12, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Quality:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This clone is available royalty-free through LLNL; contact the IMAGE Consortium (infedimage llnl.gov) for further information. Trace considered overall poor quality Possible reversed clone: similarity on wrong strand Insert Length: 575 Std Error: 0.00
                                                                             96276048
                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                              Homo sapiens
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Location/Qualifiers
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77.778
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/clone="IMAGE:188240"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /clone_lib="Soares breast 3NbHBst"
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75, 35121 Padua, Italy
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Gaps: 0
Percent Identity: 55.556
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US-08-860-232-1 x F31384/rev
                                                                   FEATURES
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LOCUS B02861
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Ratio:
                                                                                                                                                                           McDermott Center for Human Growth and Development University of Texas Southwestern Medical Center Al 5323 Harry Hines Blvd, Dallas TX 75235-8591 Tel: 214-648-1600
                                                                                                                                                                                                                                                                                                                                                                          Evans.G.A., Burbee,D., Davies,C., Hahner,L., Oliver,T., Gilbert,M., Jones,D., Ward,T., Gillilan,E., Schagemann,J., Probst,S. ., Harris,J., DeFord,J., McFarland,J., Burzinski,K., Khan,M., Kupfer,K. and
                                                                                                              Seq primer:
Class: cosmi
                                                                                                                                                                                                                                                                                          Contact: Evans GA, Shane Probst
                                                                                                                                                                                                                                                                                                              Unpublished (1996)
                                                                                                                                                                                                                                                                                                                                   Genomic Sequence Sampled Map of Chromosome 11
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Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
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                                                                                                                                                   Email: gevans@utsw.swmed.edu, shane@mcdermott.swmed.edu
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  (bases 1 to 58)
                                                                                     quality sequence stop: 58
                                                                                                            cosmid ends
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /tissue_type="pectoral muscle (after mastectomy)"
/note="Vector: pcDNAII (Invitrogen); Site_1: BstXI;
Site_2: NotI: The library was constructed by G.
Lanfranchi. This library is not subtracted nor normalized.
The first strand cDNA was primed with a biotinylated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              directionally cloned into BstXI-NotI cut pcDNAII vector." 7 \text{ c} 16 \text{ g} 15 \text{ t}
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                /organism="Homo sapiens"
                                                              Location/Qualifiers
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SRL flow sorted Chromosome 11 specific cosmid Homo
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Percent Identity:
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LOCUS AA206512
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MEDLINE
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1 (bases 1 to 40)

Hillier, L., Lennon, G., Becker, M., Bonaldo, M.F., Chiapelli, B., Chissoe, S., Dietrich, N., DuBuque, T., Favello, A., Gish, W., Hawkins M., Hultman, M., Kucaba T., Lacy, M., Le, N., Mardis, E., Moore, B., Morris, M., Parsons, J., Prange, C., Rifkin, L., Rohlfing, T., Schellenberg, K., Soares, M.B., Tan, F., Thierry-Meg, J., Trevaskis, E., Underwood, K., Wohldmann, P., Waterston, R., Wilson, R. and Marra, M. Genome Res. 6 (9), 807-828 (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AA206512 40 bp mRNA EST 27-JAN-1997 zq56f04.rl Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone IMAGE:645631 5' similar to TR:G1345404 G1345404 TFIID SUBUNIT
                                                                                                                                                                                                                                                                            This clone is available royalty-free through LLNL; contact the IMAGE Consortium (info@image.llnl.gov) for further information. Trace considered overall poor quality Possible reversed clone: similarity on wrong strand Seq.primer: -28M13 rev2 from Amersham
                                                                                                                                                                                                                                                                                                                                                                                                       Tel: 314 286 1800
Fax: 314 286 1810
Email: est@watson.wustl.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Washington University School of Medicine 4444 Forest Park Parkway, Box 8501, St.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mRNA sequence.
AA206512
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Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Contact: Wilson RK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97044478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AA206512.1 GI:1801893
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/note="Vector: sCos-1; Human Chromosome 11 specific cosmic
library prepared from flow sorted human Chromosome 11
derived from Chinese Hampster Ovary (CHO) monochromosomal
somatic cell hybrid, J1"

1 others
                                                                                                                          /organism="Homo sapiens"
/db_xref="GDB:5215882"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cosmid"
                                             /clone="IMAGE:645631"
/clone_lib="Stratagene neuroepithelium (#937231)"
/dev_stage="Ntera-2/RA neuroepithelial cells"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27.00
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/clone_lib="cSRL flow sorted Chromosome 11 specific
/lab_host="SOLR (kanamycin resistant)"
/note="Vector: pBluescript SK-; Site_1:
                                                                                                                                                                                                            1. .40
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length: 9
Gaps: 0
Percent Identity: 44.444
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EcoRI; Site_2:
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VERSION
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  BASE COUNT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
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                                                                                                                                                                                                                                   source
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                                                                                                                                                                                                                                                                                          Trace considered overall poor quality
Insert Length: 1403 Std Error: 0.00
Seq primer: -40UP from Gibco
High quality sequence stop: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        to83b07.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2184853 : similar to gb:X59268 TRANSCRIPTION INITIATION FACTOR IIB (HUMAN ); contains element MSR1 repetitive element ;, mRNA sequence. A1538057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Euthería; Primates; Catarrhini; Hominidae; Homo.

1 (Dases 1 to 45)

1 (Dases 1 to 45)

1 (Notician http://www.nobi.nlm.nih.gov/ncicap.
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                                                                                                                                                                                                                                                                                                                                                                                                         cDNA Library Preparation: Life Technologies, Inc. cDNA Library Arrayed by: Greg Lennon, Ph.D. DNA Sequencing by: Washington University Genome Sequencing Center Clone distribution: NCI-CGAP clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tissue Procurement: Chri
Emmert-Buck, M.D., Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Contact: Robert Strausberg, Ph.D Tel: (301) 496-1550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tumor Gene Index
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Email: Robert_Strausberg@nih.gov
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/db_xref="taxon:9606"
/clone="InhAGE:21B4853"
/clone_lib="NCI_CGAP_Gas4"
/tissue_type="poorly differentiated adenocarcinoma with signet ring cell features"
/lab_host="DH10B"
                  Average insert size 1.69 kb. Life Technologies catalog #: 11549-011"
                                                        /note="Organ: stomach; Vector: pCMV-SPORT6; Site_1:
Site_2: NotI; Cloned unidirectionally. Primer: Olig
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83.333
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Gaps: 0
Percent Identity: 83.333
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16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ph.D.,
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US-08-860-232-1 x AI538057/rev
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Quality:
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LOCUS AA854290
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Ratio: 3.714
Percent Similarity: 70.000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            41 TTACCAGGGTACTCCTACCTATCTCCCCTT 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Trace considered overall poor quality Possible reversed clone: similarity on wrong strand Insert Length: 1438 Std Error: 0.00 Seq primer: -40m.13 fwd. ET from Amersham High quality sequence stop: 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tumor Gene Index
Unpublished (1997)
Contact: Robert Strausberg, Ph.D.
Tel: (301) 496-1550
Email: Robert_Strausberg@nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AA854290 46 bp mRNA EST 31-DEC-1998 a)65d05.s1 Soares_parathyroid_tumor_NbHPA Homo sapiens cDNA clone TMAGE:1401321 3' similar to SW:S111_HUMAN P31949 CALGIZZARIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Email: Robert_Strausberg@nih.gov cDNA Library Preparation: M. Bento Soares, Ph.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 46)

NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   www-bio.llnl.gov/bbrp/image/image.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CDNA Library Arrayed by: Greg Lennon, Ph.D.
DNA Sequencing by: Washington University Genome
Clone distribution: NCI-CGAP clone distribution
found through the I.M.A.G.E. Consortium/LLNL at:
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AA854290
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ph.D.
TTTTT-3'], double-stranded CDNA was size selected, ligated to Eco RI adapters (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of a modified pT7T3 vector (Pharmacia). Library went through one round of normalization to a Cot = 5. Library constructed by Bento Soares and M.Fatima Bonaldo. RNA from sporadic parathyroid adenomas was kindly provided by Dr. Stephen Marx, National
                                                                                                                                                                                                                                                    /clone="IMAGE:1401321"
/clone="IMAGE:1401321"
/clone=lib="Soares_parathyroid_tumor_NbHPA"
/tissue_type="parathyroid tumor"
/dev_stage="adult"
/lab_host="bH10B (ampicillin resistant)"
/lab_host="bH10B (ampicillin resistant)"
/note="Organ: parathyroid gland; Vector: pT7T3D (Pharmacia ) with a modified polylinker; Site_1: Not I; Site_2: Eco
| With a modified polylinker; Site_1: Not I oligo(dT)
                                                                                                                                                                            /organism="Homo sapiens"
/db_xref="taxon:9606"
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                                                                             alignment_block:
US-08-860-232-1 x AA854290
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                                                      Align seg 1/1 to: AA854290
                                                                                                                         Percent Similarity:
10 CTACCTGACCATCACTGCTTGGGTCCAGTT 39
                        2 LeuProGluAsnAsnValLeuSerProLeu 11
                                                                                                                                                   Quality:
                                                                                                                                     Ratio:
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                                                                                                                      26.00
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90.000
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Gaps: 0
Percent Identity: 40.000
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